

RF Test Data for Bluetooth(BDR+EDR) (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless Headphone
Test Model:	UG-01
Sample ID:	RW-C-202201-0243-2-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC3.7V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TBR-C-202201-0243-2.	

Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-2.834	21	Pass
NVNT	1-DH1	2441	Ant1	-2.428	21	Pass
NVNT	1-DH1	2480	Ant1	-1.993	21	Pass
NVNT	2-DH1	2402	Ant1	-0.44	21	Pass
NVNT	2-DH1	2441	Ant1	-0.173	21	Pass
NVNT	2-DH1	2480	Ant1	0.147	21	Pass
NVNT	3-DH1	2402	Ant1	0.238	21	Pass
NVNT	3-DH1	2441	Ant1	0.449	21	Pass
NVNT	3-DH1	2480	Ant1	0.695	21	Pass

Test Graphs

Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1











-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.920	0	Pass
NVNT	1-DH1	2441	Ant1	0.927	0	Pass
NVNT	1-DH1	2480	Ant1	0.927	0	Pass
NVNT	2-DH1	2402	Ant1	1.221	0	Pass
NVNT	2-DH1	2441	Ant1	1.265	0	Pass
NVNT	2-DH1	2480	Ant1	1.252	0	Pass
NVNT	3-DH1	2402	Ant1	1.210	0	Pass
NVNT	3-DH1	2441	Ant1	1.214	0	Pass
NVNT	3-DH1	2480	Ant1	1.216	0	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1





Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.863
NVNT	1-DH1	2441	Ant1	0.832
NVNT	1-DH1	2480	Ant1	0.858
NVNT	2-DH1	2402	Ant1	1.1576
NVNT	2-DH1	2441	Ant1	1.1623
NVNT	2-DH1	2480	Ant1	1.1474
NVNT	3-DH1	2402	Ant1	1.1412
NVNT	3-DH1	2441	Ant1	1.1497
NVNT	3-DH1	2480	Ant1	1.1468

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1



OBW NVNT 1-DH1 2441MHz Ant1



OBW NVNT 1-DH1 2480MHz Ant1



OBW NVNT 2-DH1 2402MHz Ant1



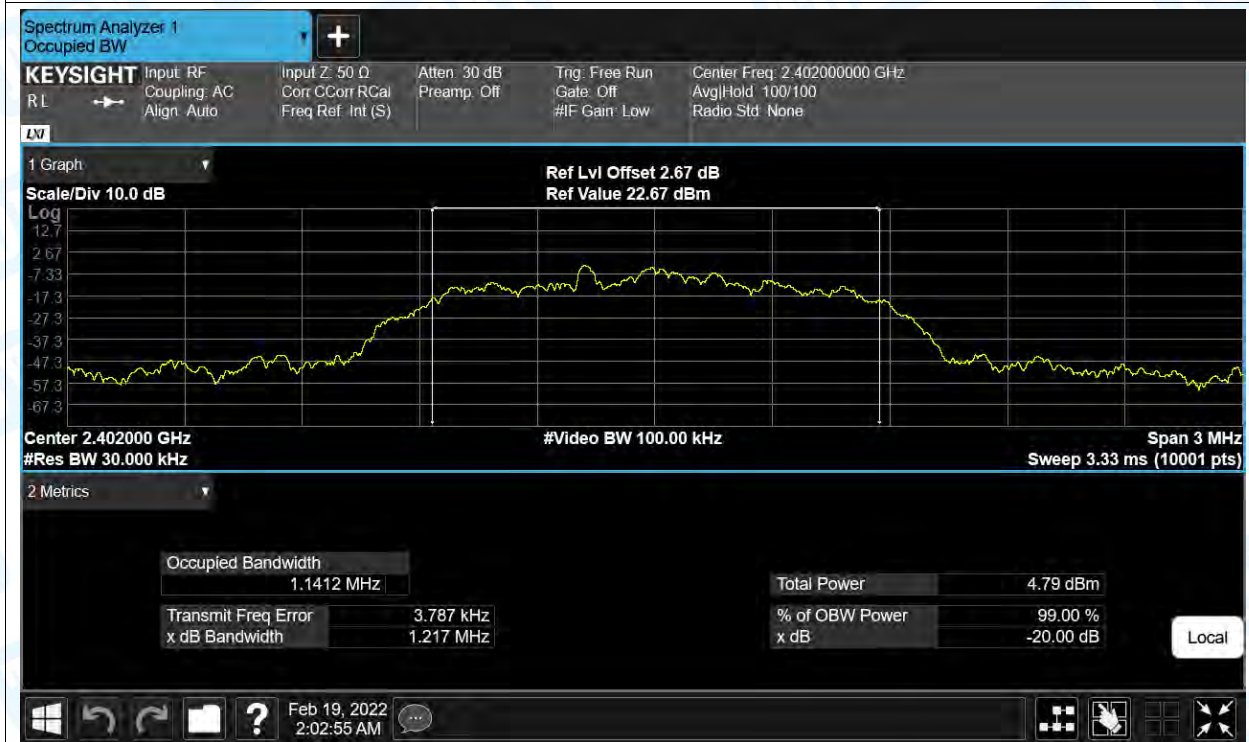
OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

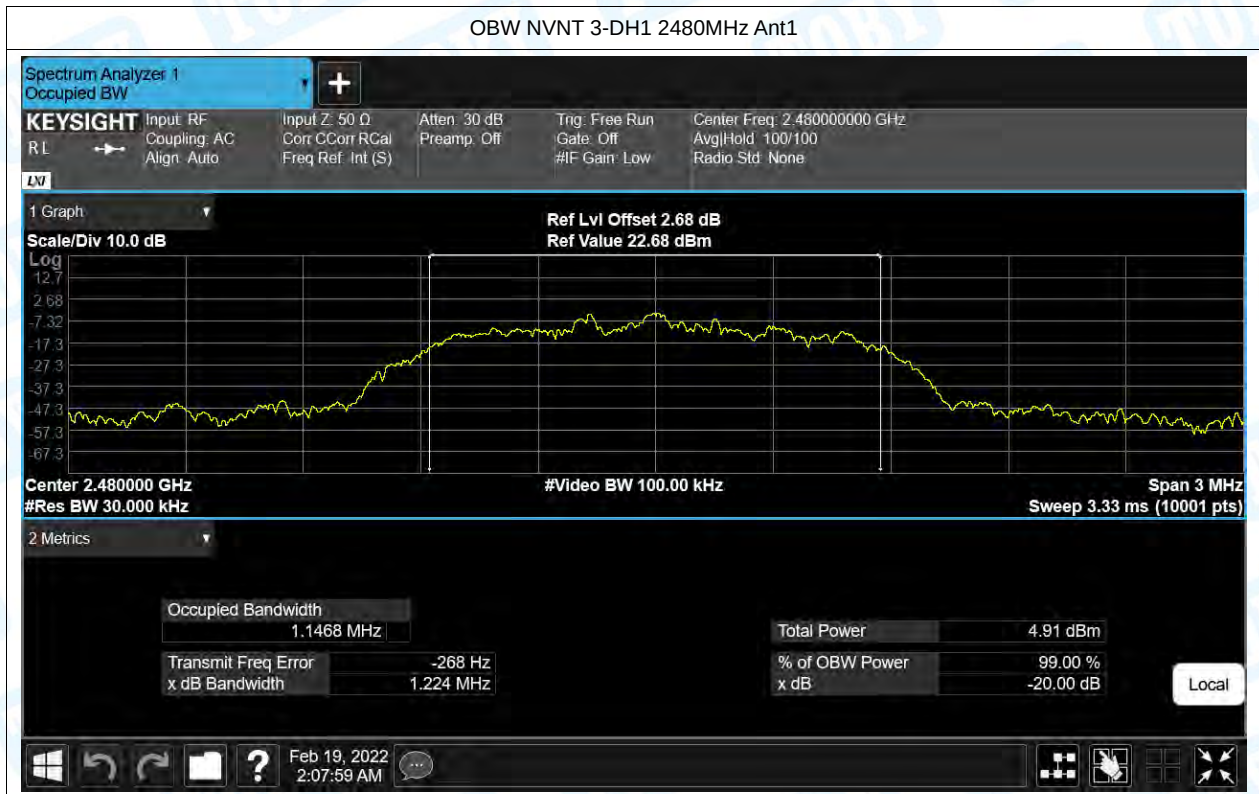


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2402.155	2402.821	0.666	0.025	Pass
NVNT	1-DH1	Ant1	2441.143	2441.824	0.681	0.025	Pass
NVNT	1-DH1	Ant1	2478.978	2480.157	1.179	0.025	Pass
NVNT	2-DH1	Ant1	2401.816	2403.13	1.314	0.025	Pass
NVNT	2-DH1	Ant1	2440.978	2441.971	0.993	0.025	Pass
NVNT	2-DH1	Ant1	2478.813	2479.818	1.005	0.025	Pass
NVNT	3-DH1	Ant1	2401.981	2403.136	1.155	0.025	Pass
NVNT	3-DH1	Ant1	2441.149	2441.974	0.825	0.025	Pass
NVNT	3-DH1	Ant1	2478.984	2479.809	0.825	0.025	Pass

Test Graphs

CFS NVNT 1-DH1 2402MHz Ant1



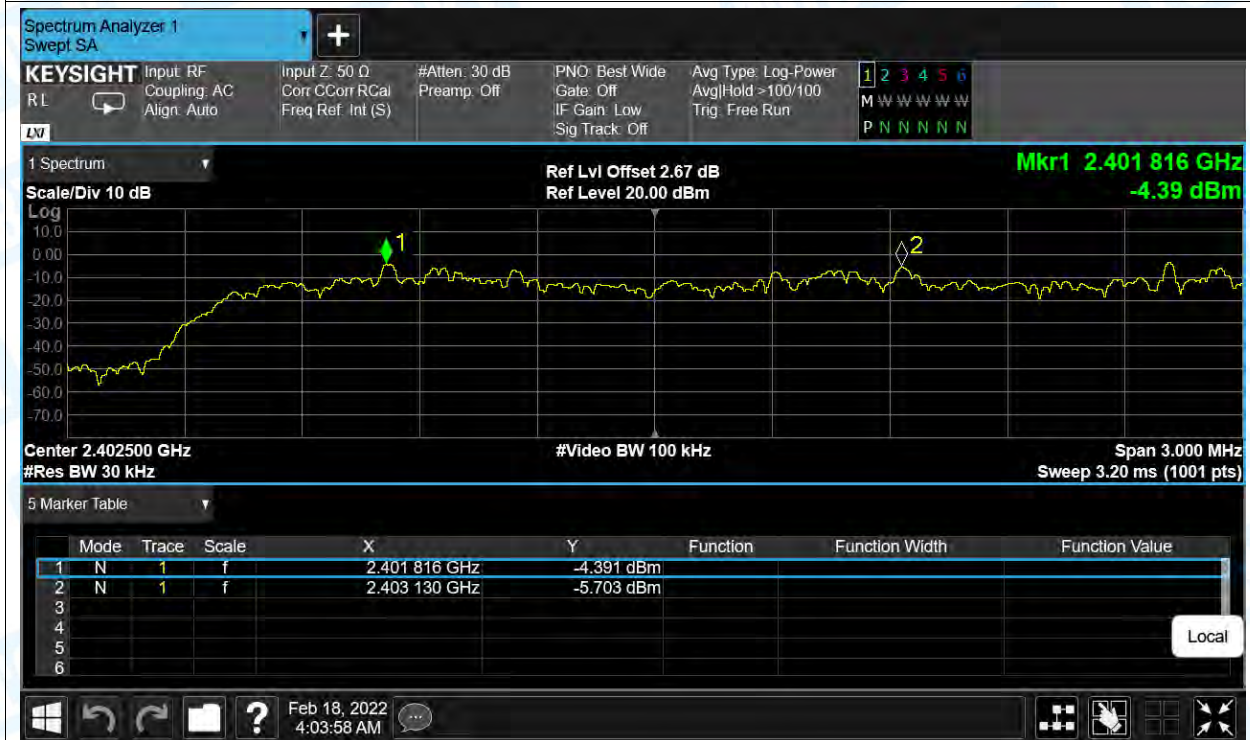
CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 1-DH1 2480MHz Ant1



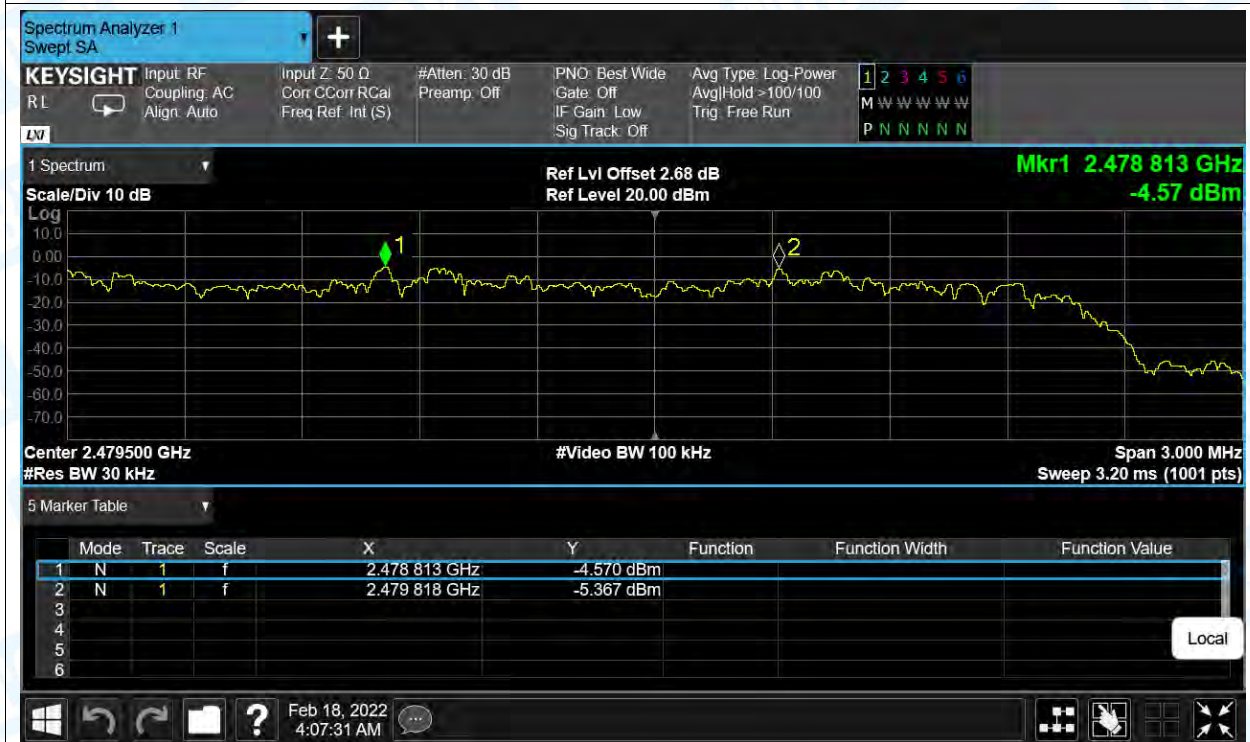
CFS NVNT 2-DH1 2402MHz Ant1



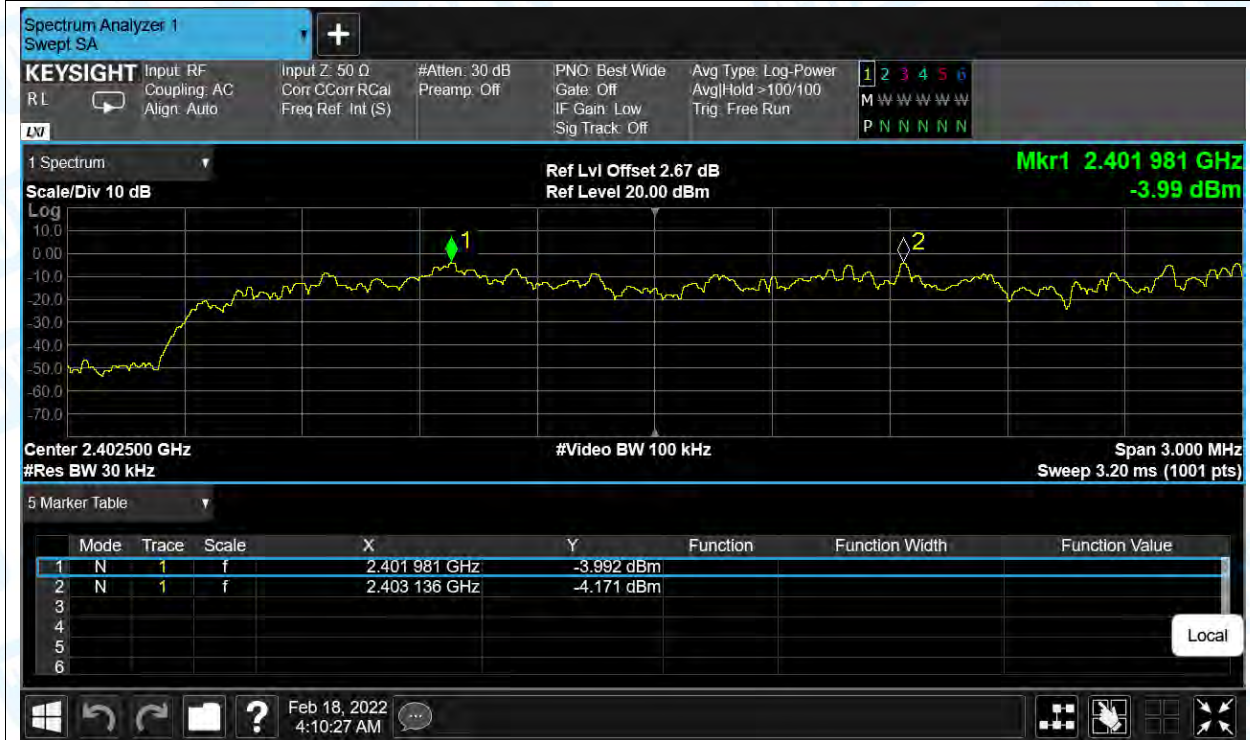
CFS NVNT 2-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2480MHz Ant1

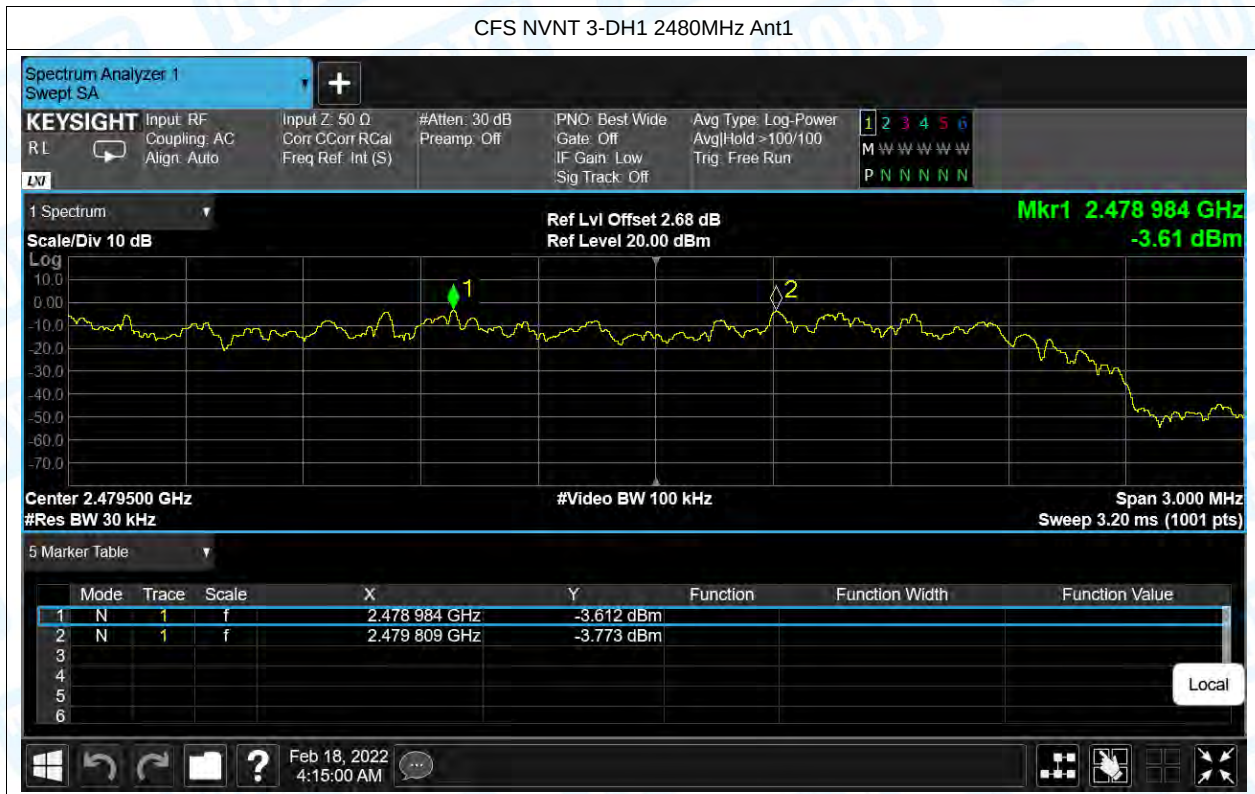


CFS NVNT 3-DH1 2402MHz Ant1



CFS NVNT 3-DH1 2441MHz Ant1



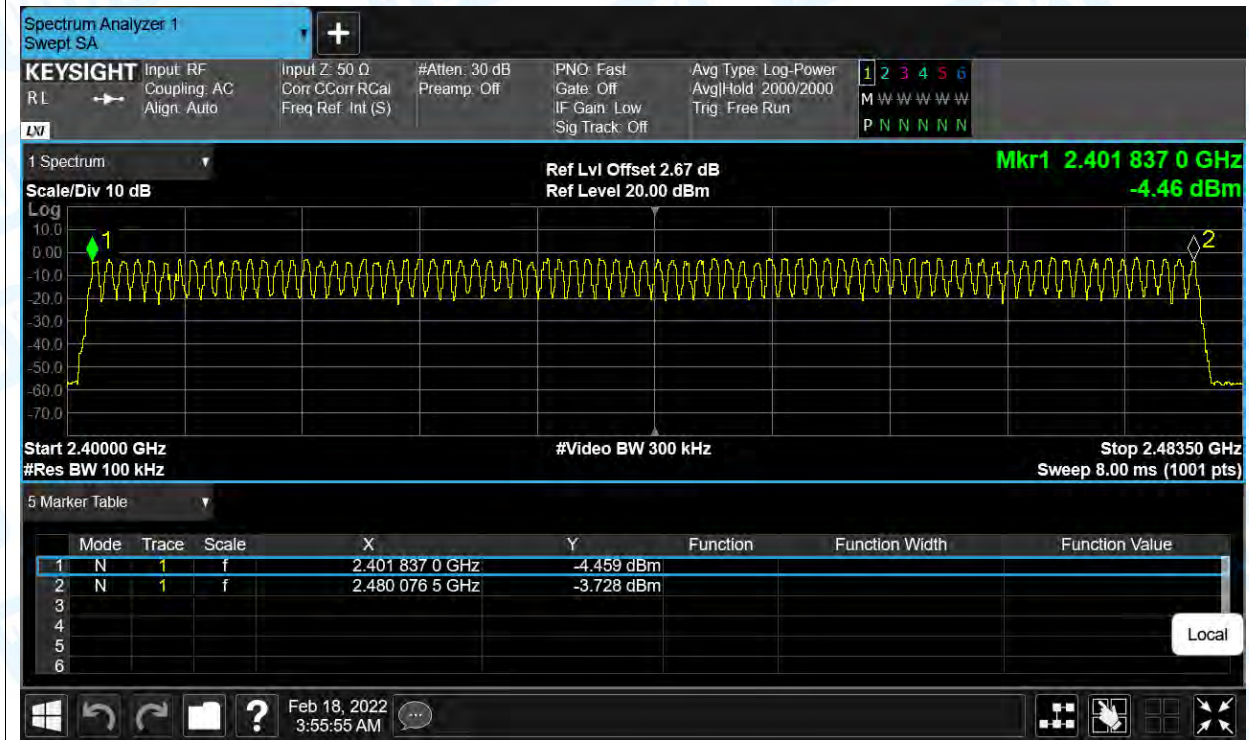


Number of Hopping Channel

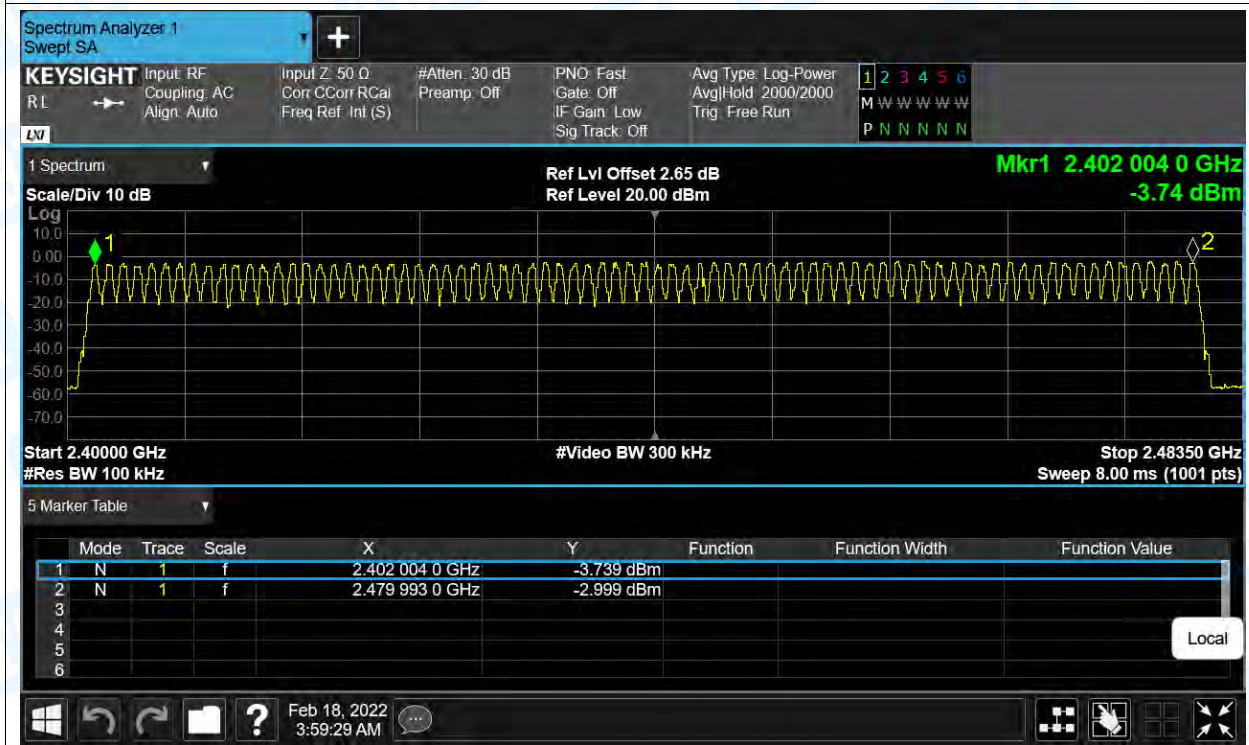
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

Test Graphs

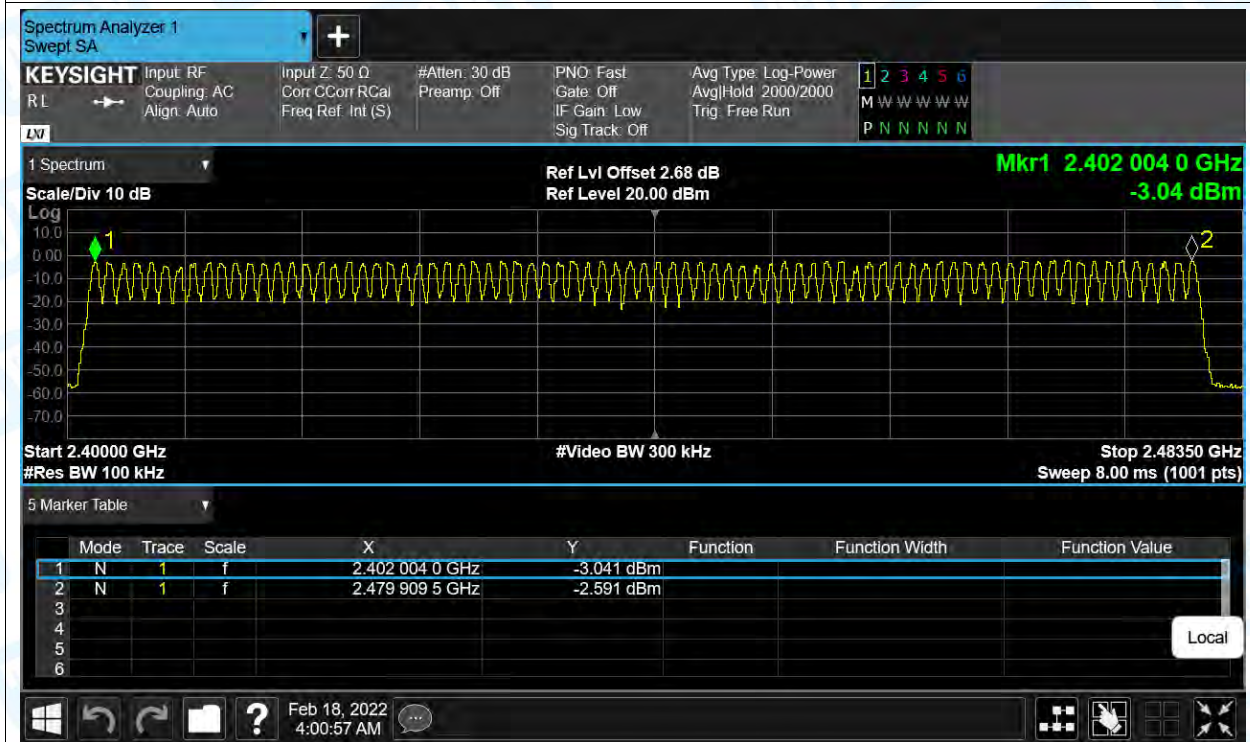
Hopping No. NVNT 1-DH1 2402MHz Ant1



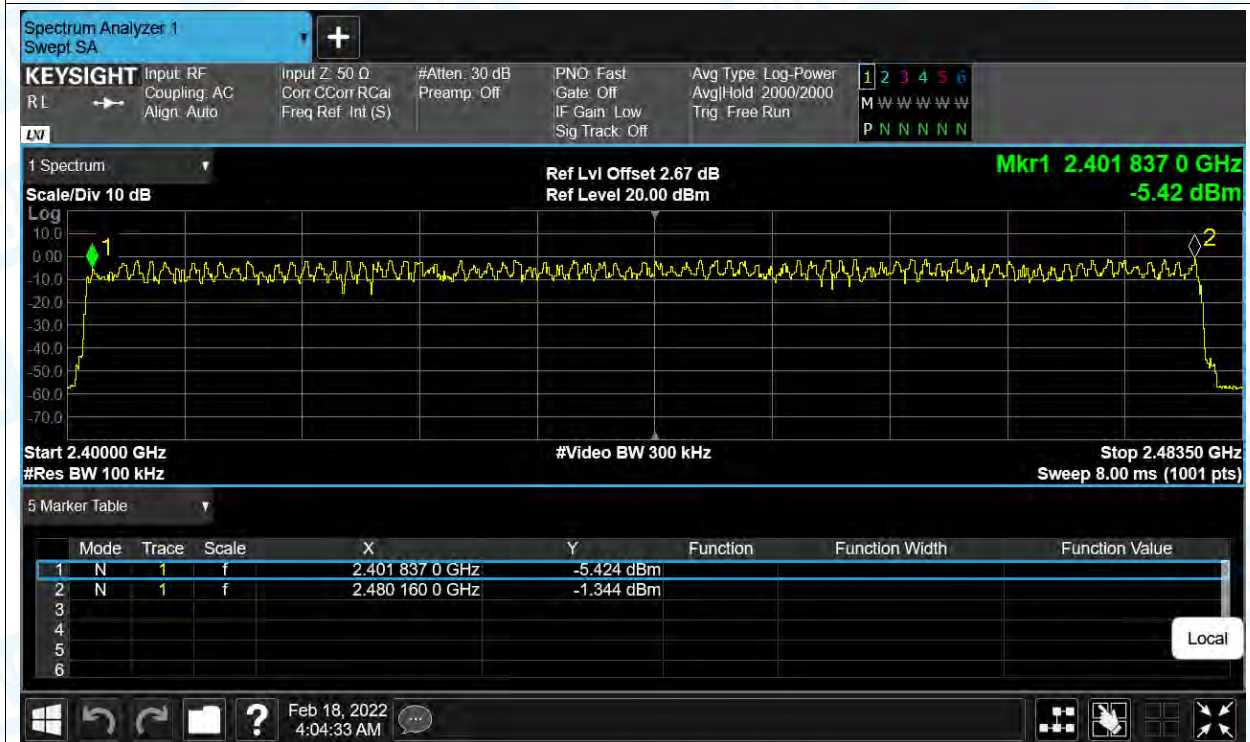
Hopping No. NVNT 1-DH1 2441MHz Ant1



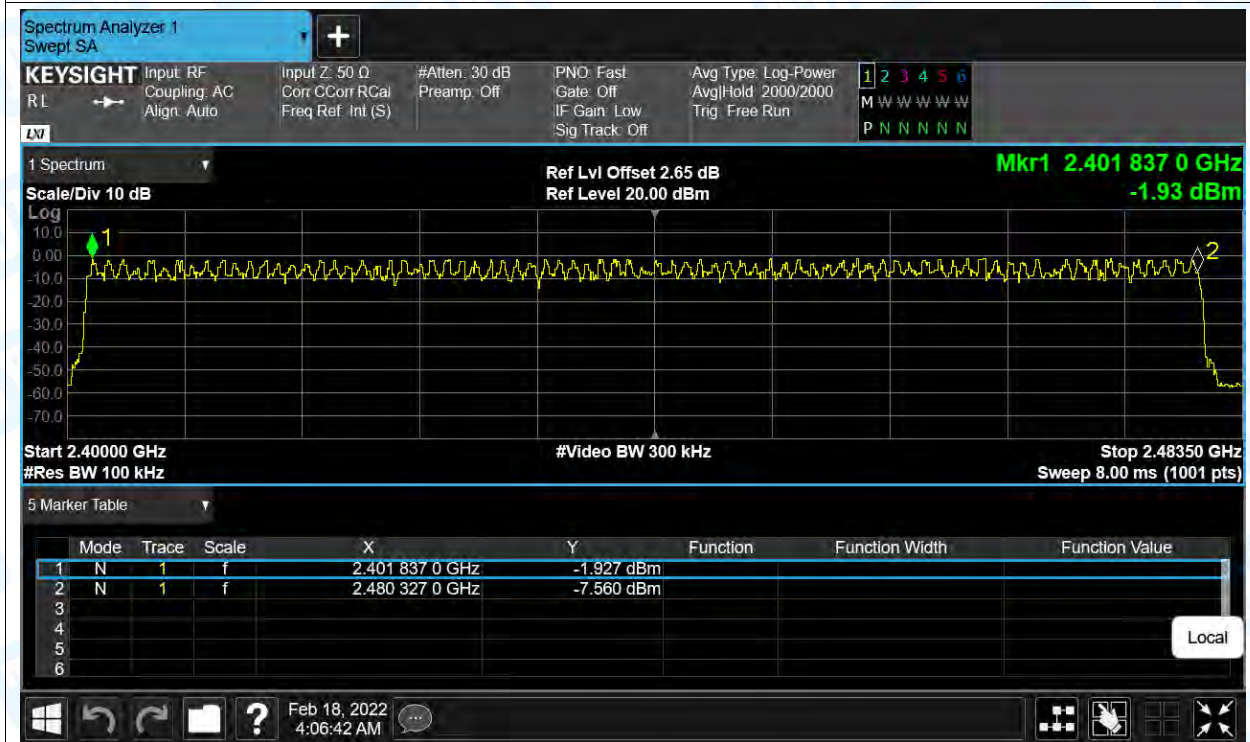
Hopping No. NVNT 1-DH1 2480MHz Ant1



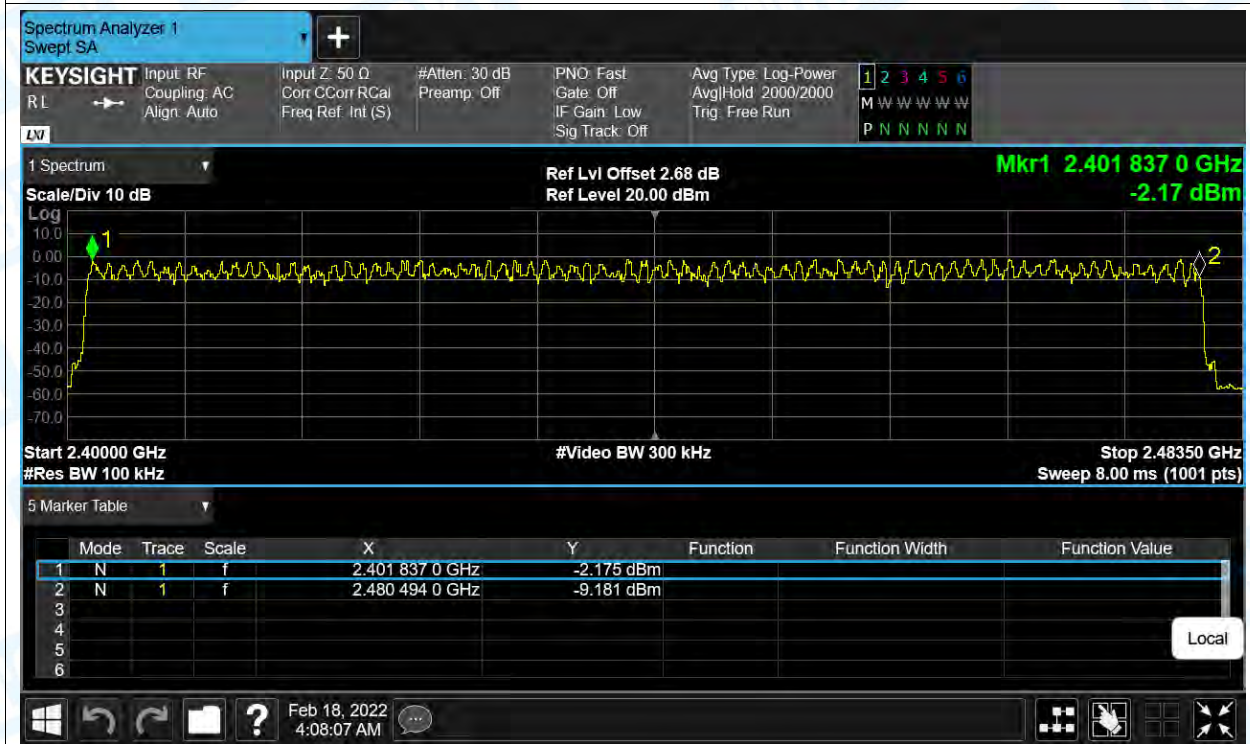
Hopping No. NVNT 2-DH1 2402MHz Ant1



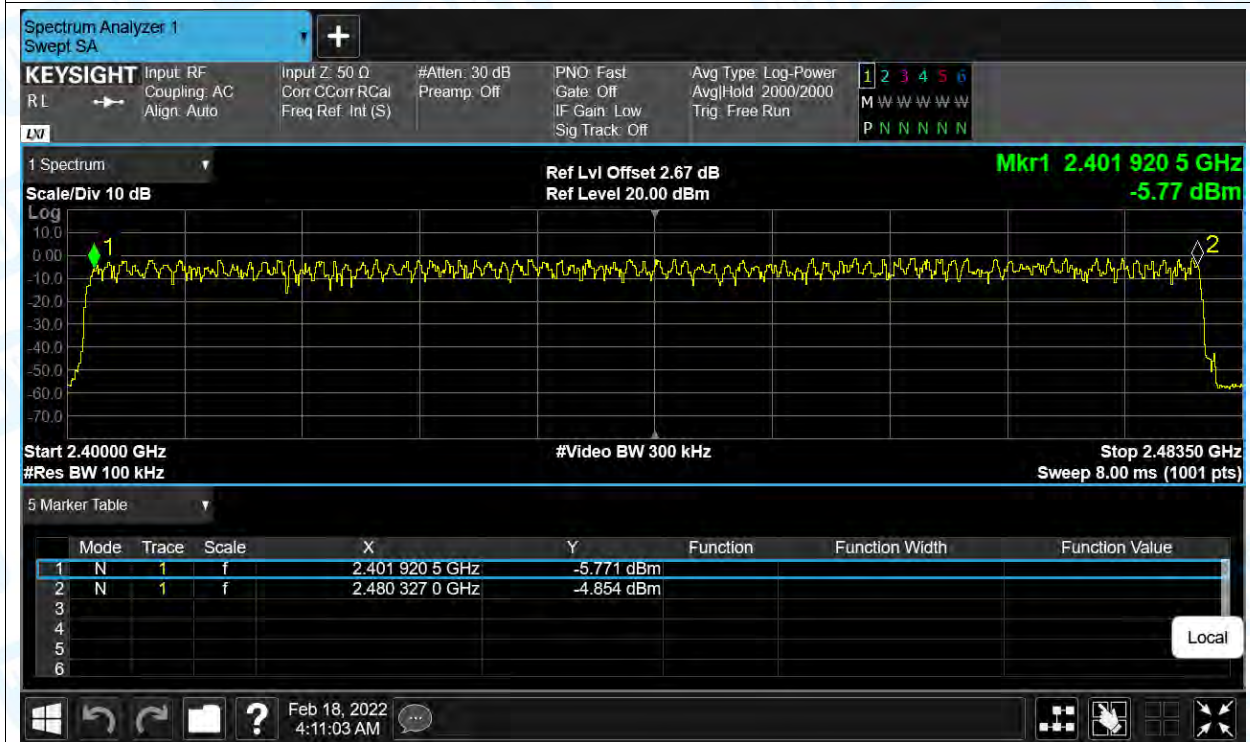
Hopping No. NVNT 2-DH1 2441MHz Ant1



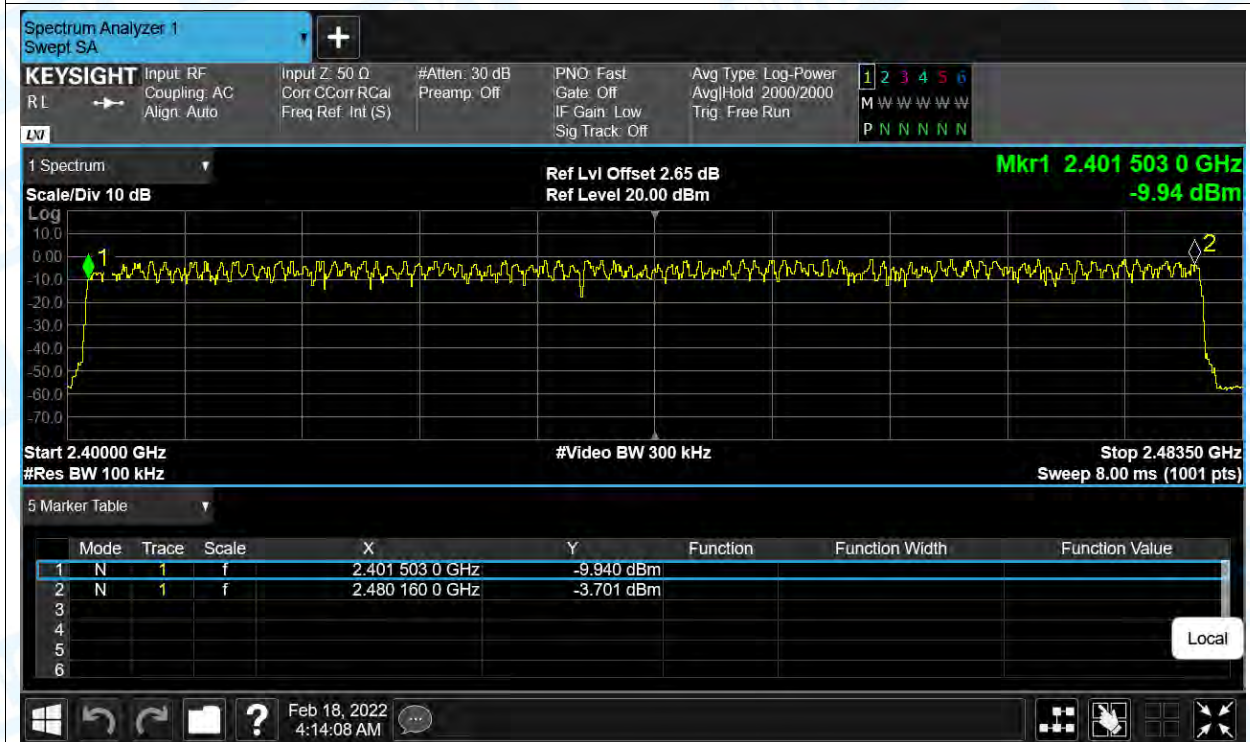
Hopping No. NVNT 2-DH1 2480MHz Ant1

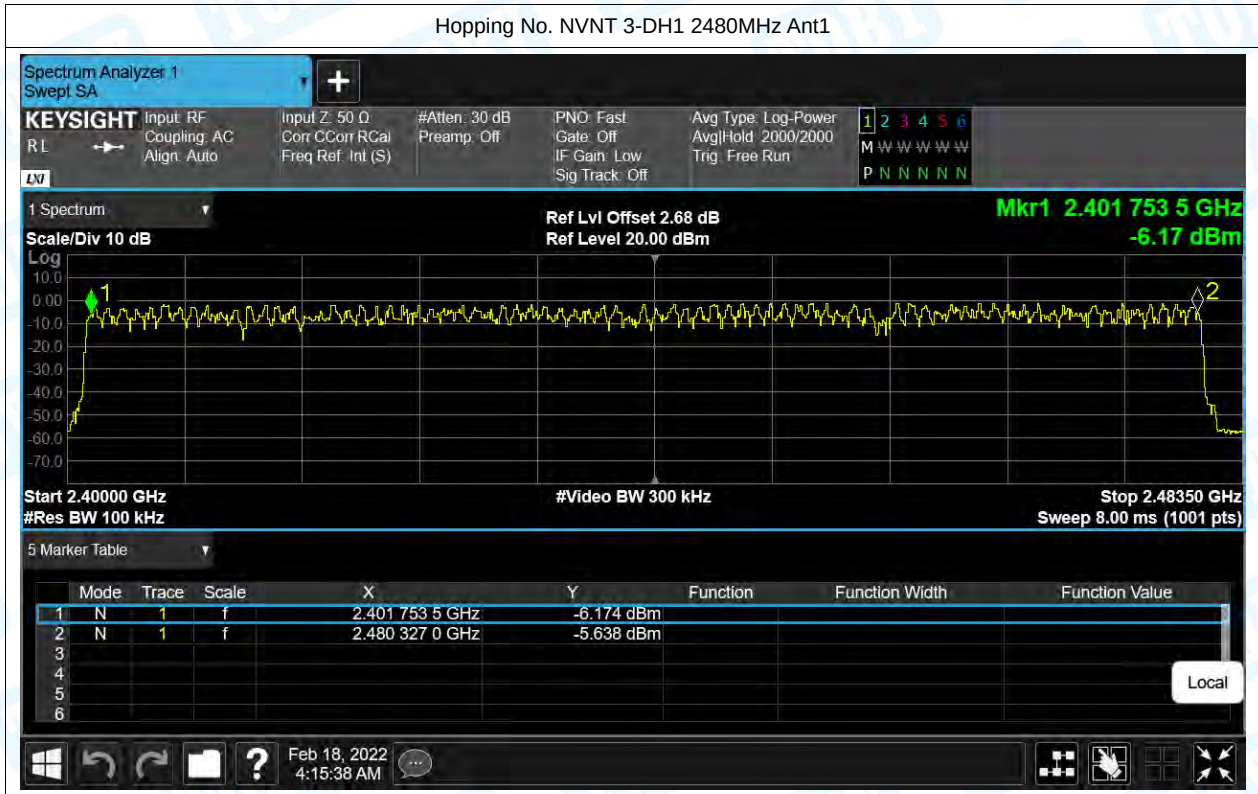


Hopping No. NVNT 3-DH1 2402MHz Ant1



Hopping No. NVNT 3-DH1 2441MHz Ant1





Band Edge

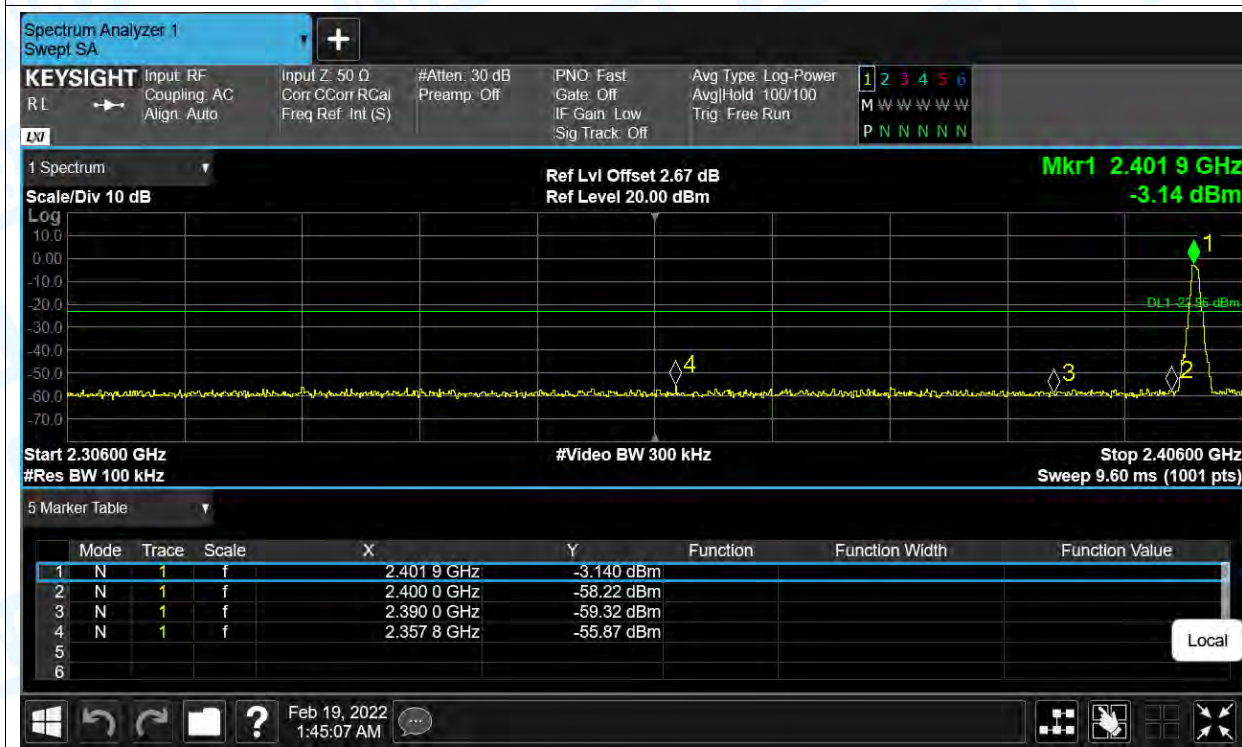
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-52.92	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-54.47	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-54.14	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-55.06	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-53.91	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.17	-20	Pass

Test Graphs

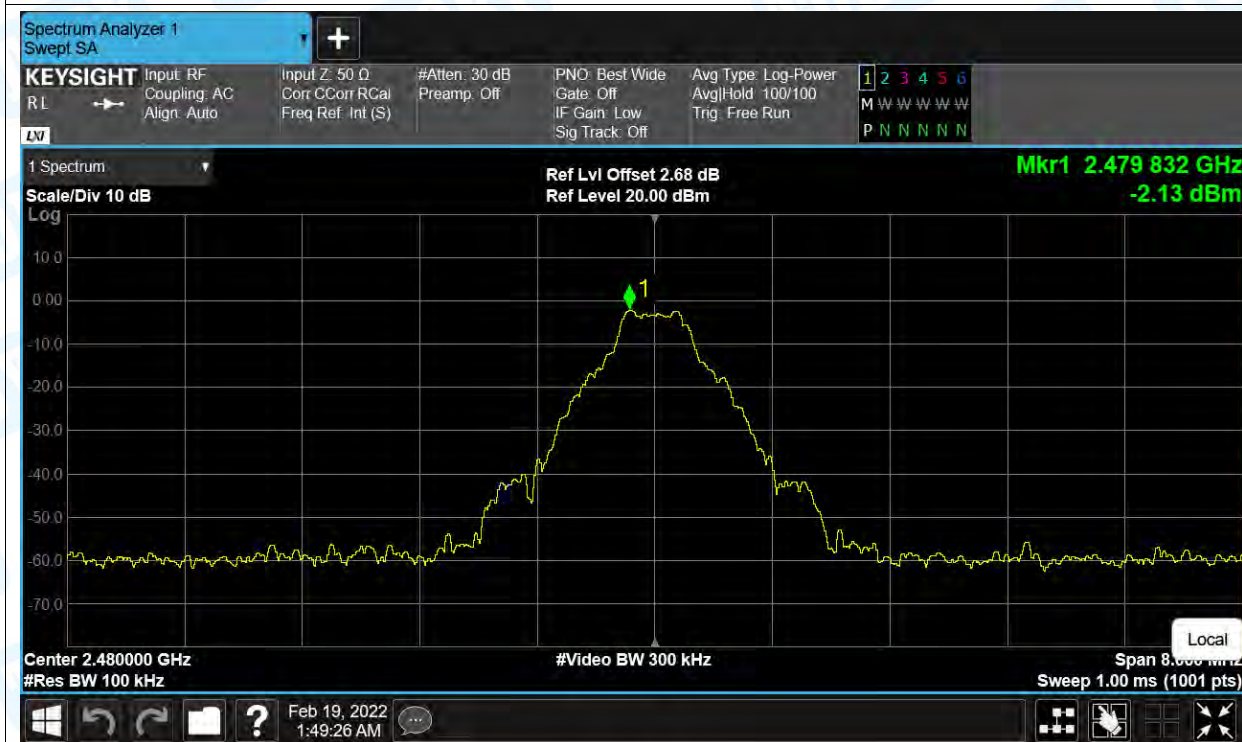
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



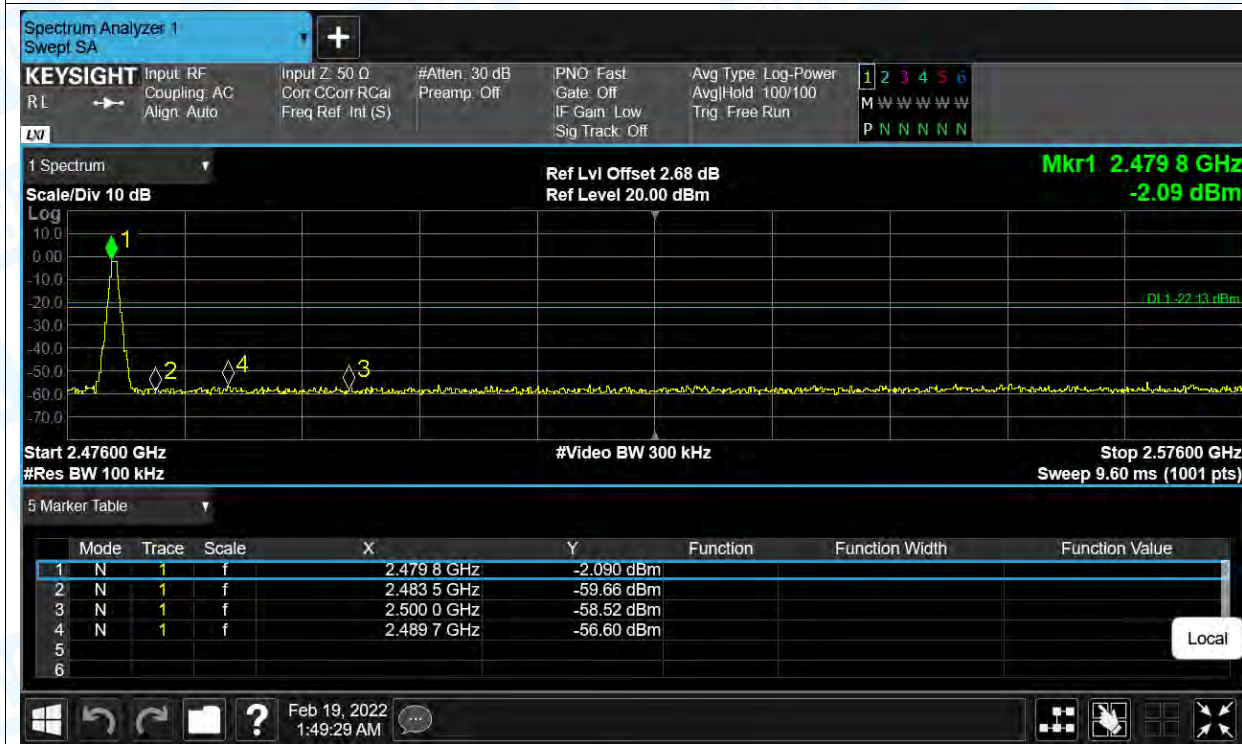
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

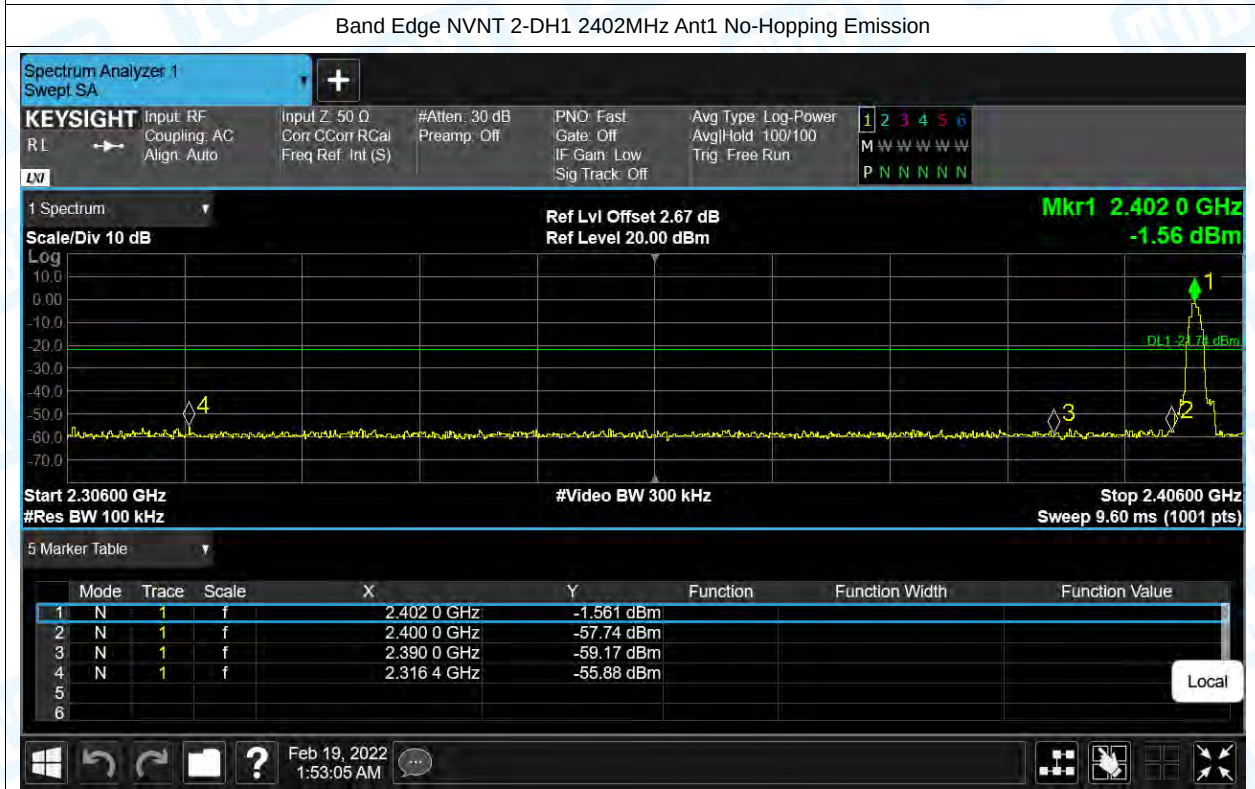
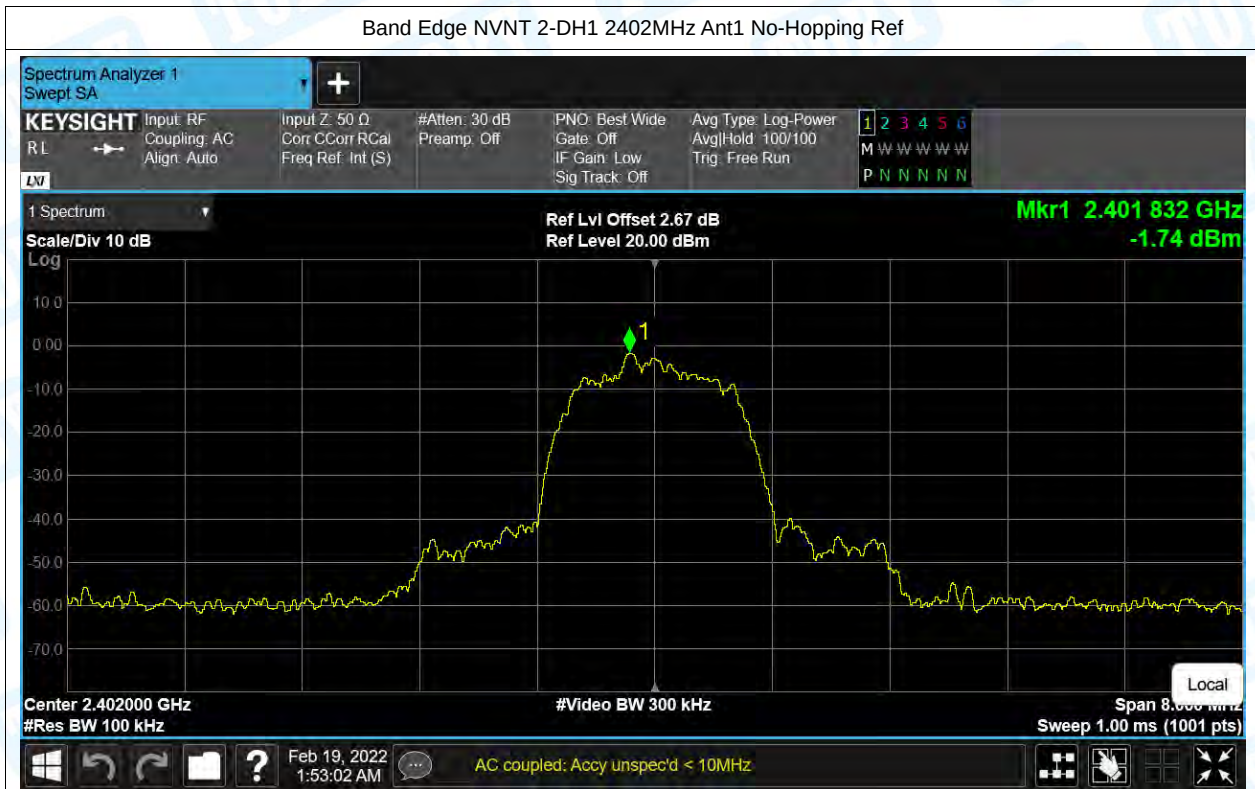


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission

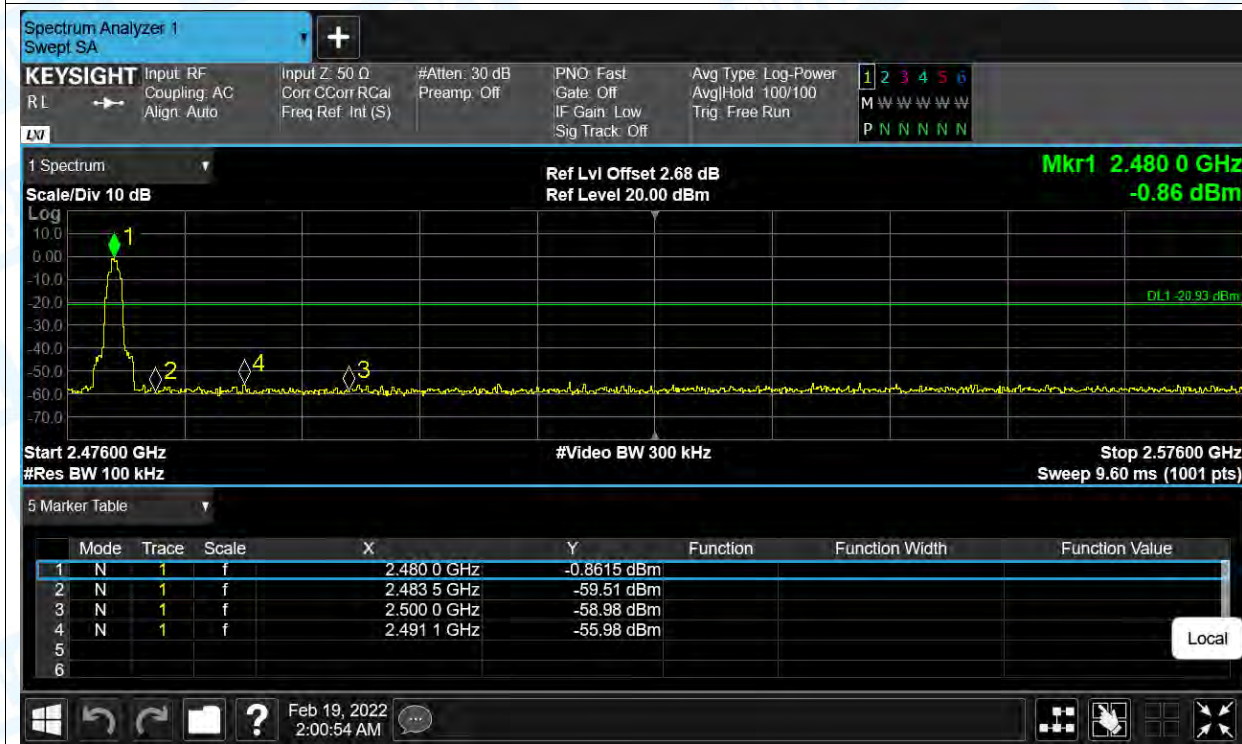




Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



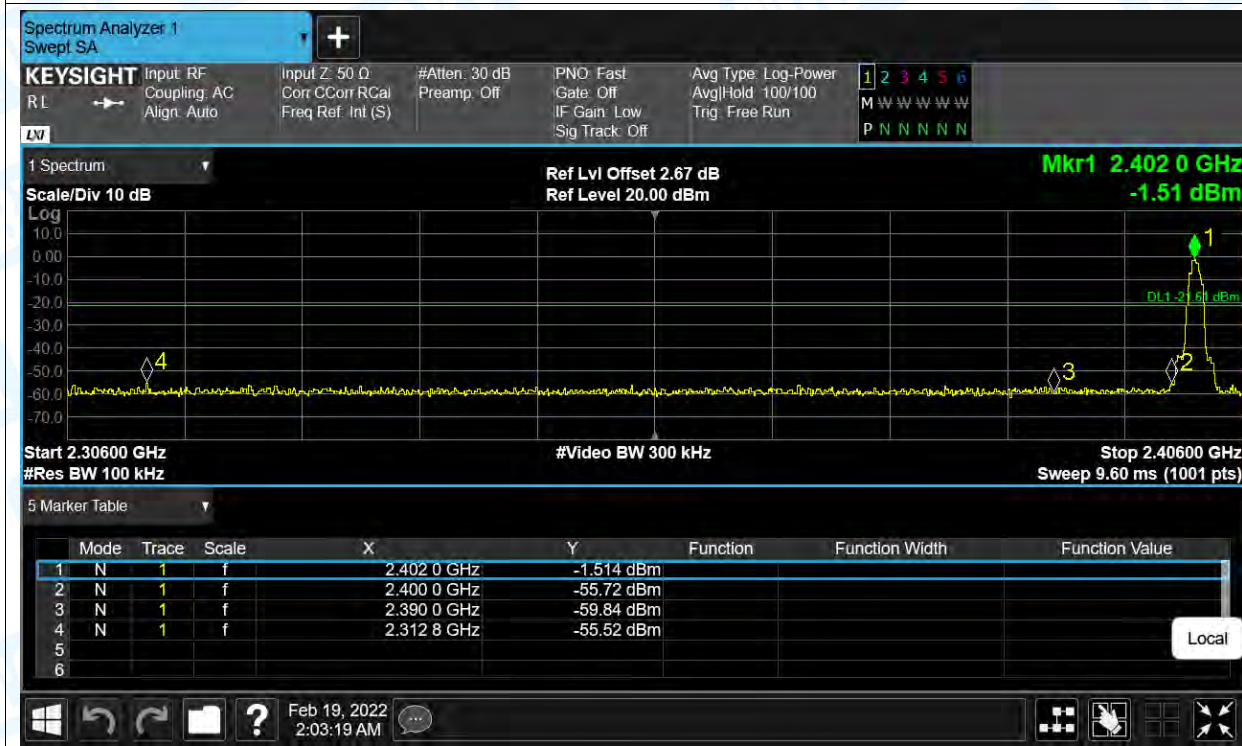
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



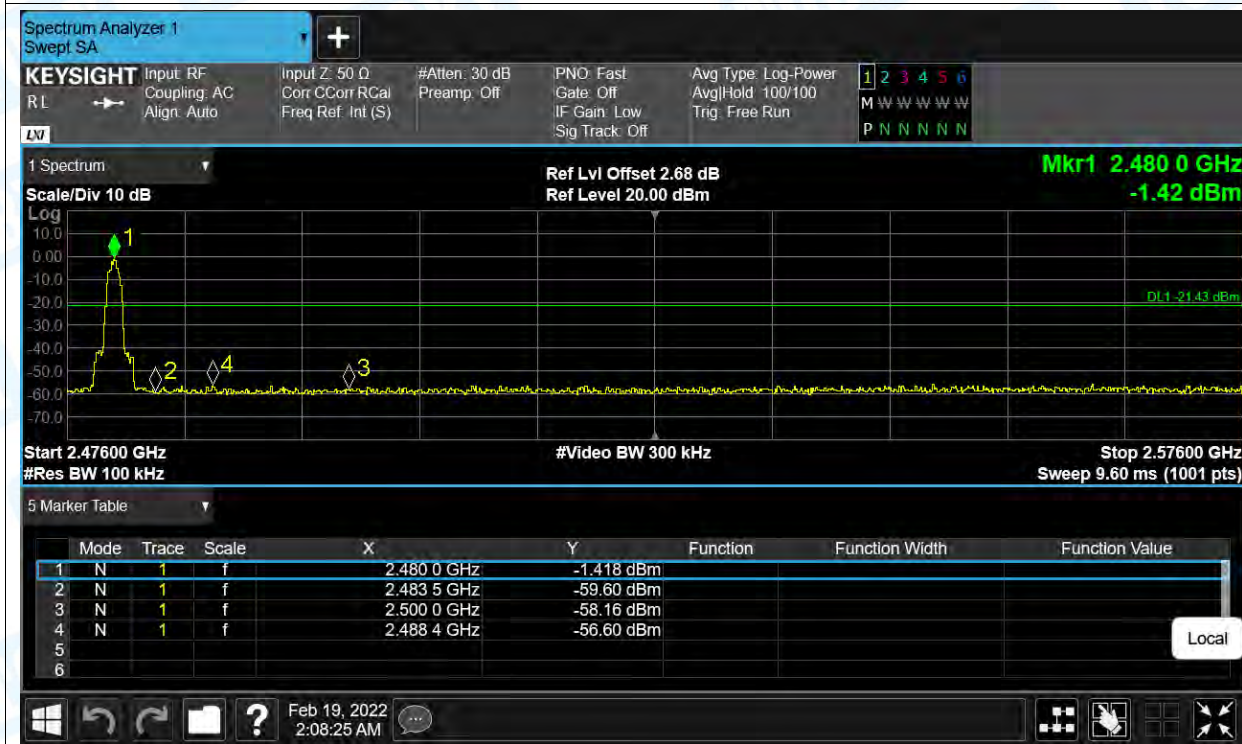
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission



Band Edge(Hopping)

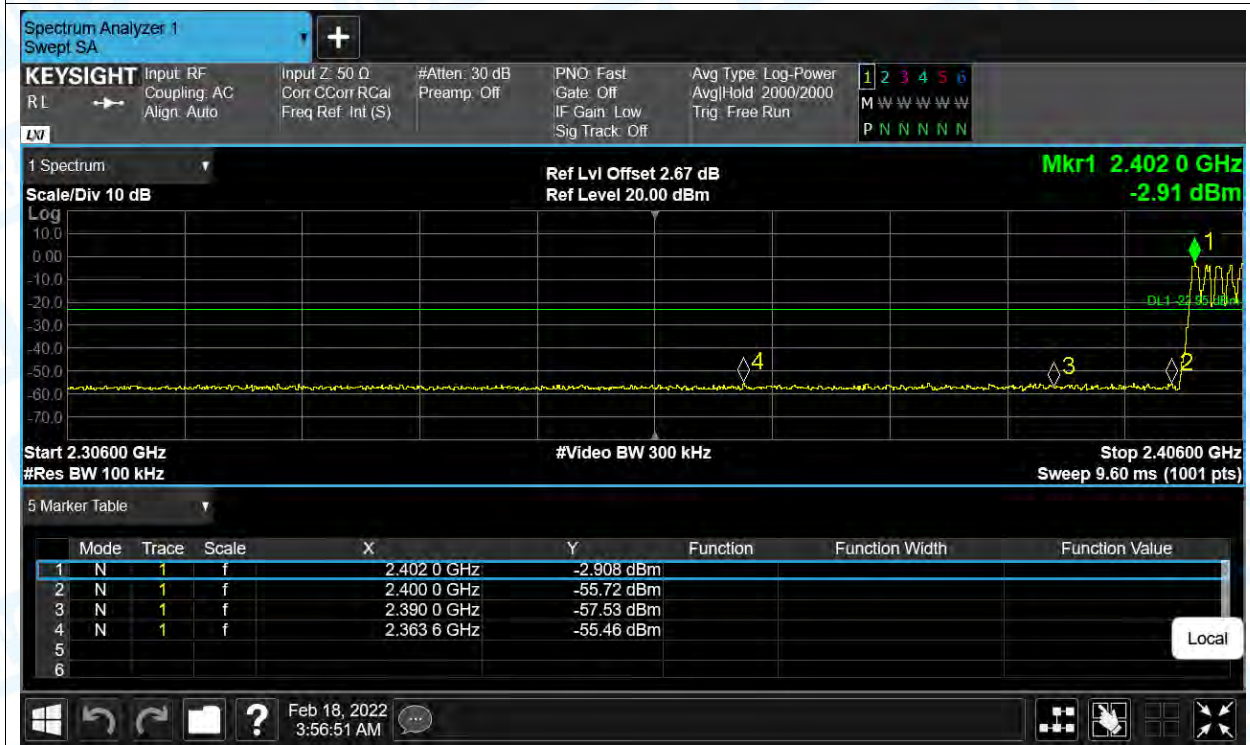
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-52.51	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-52.83	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.89	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-53.32	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-53.16	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-53.88	-20	Pass

Test Graphs

Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



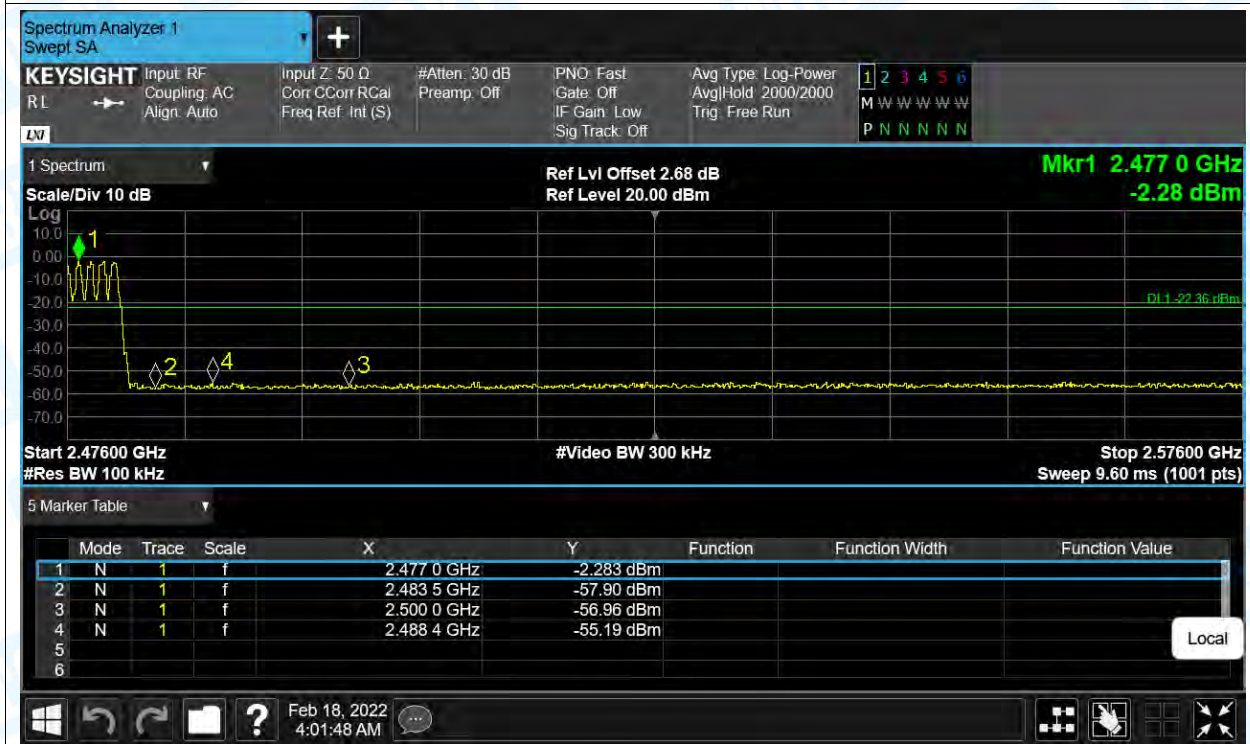
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



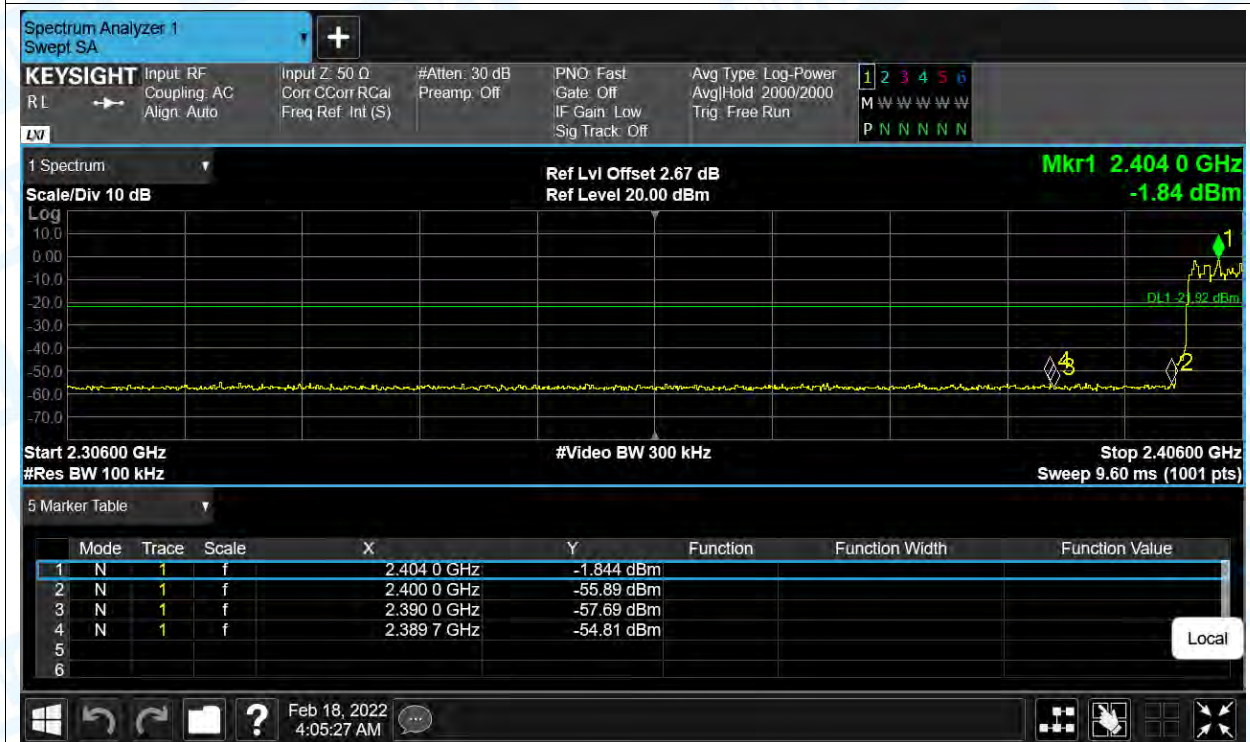
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



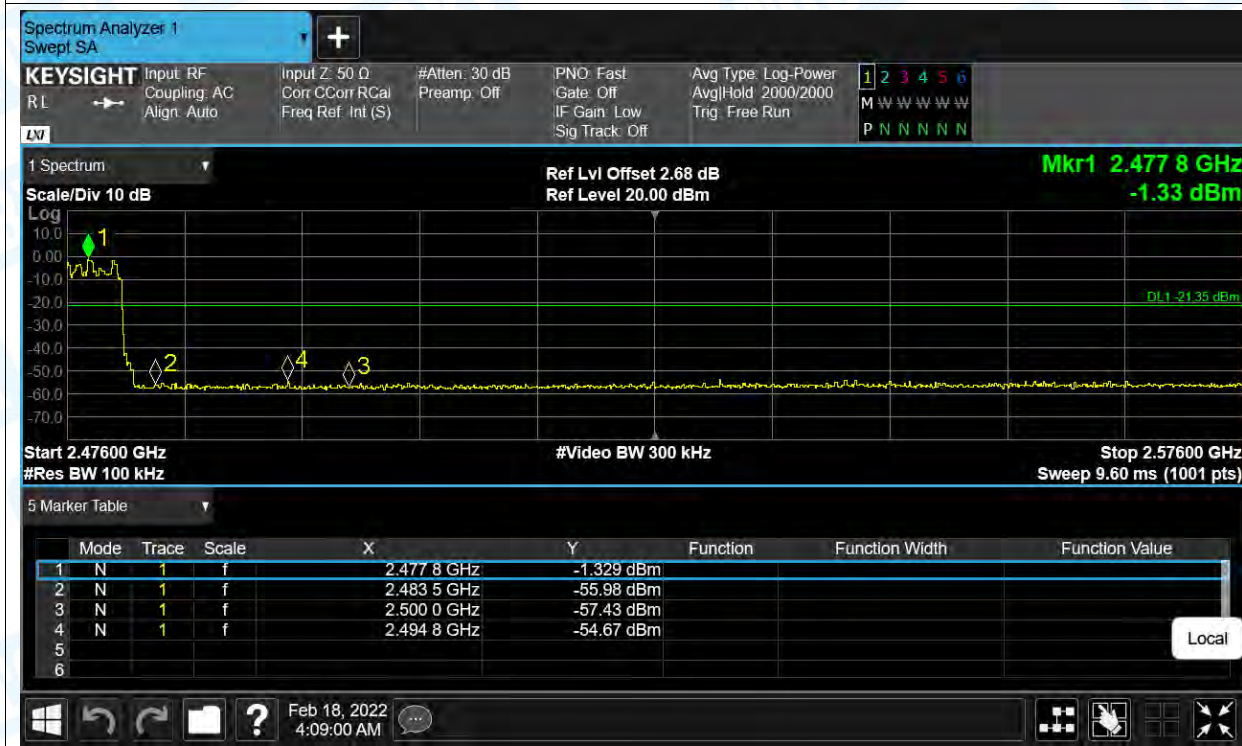
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission

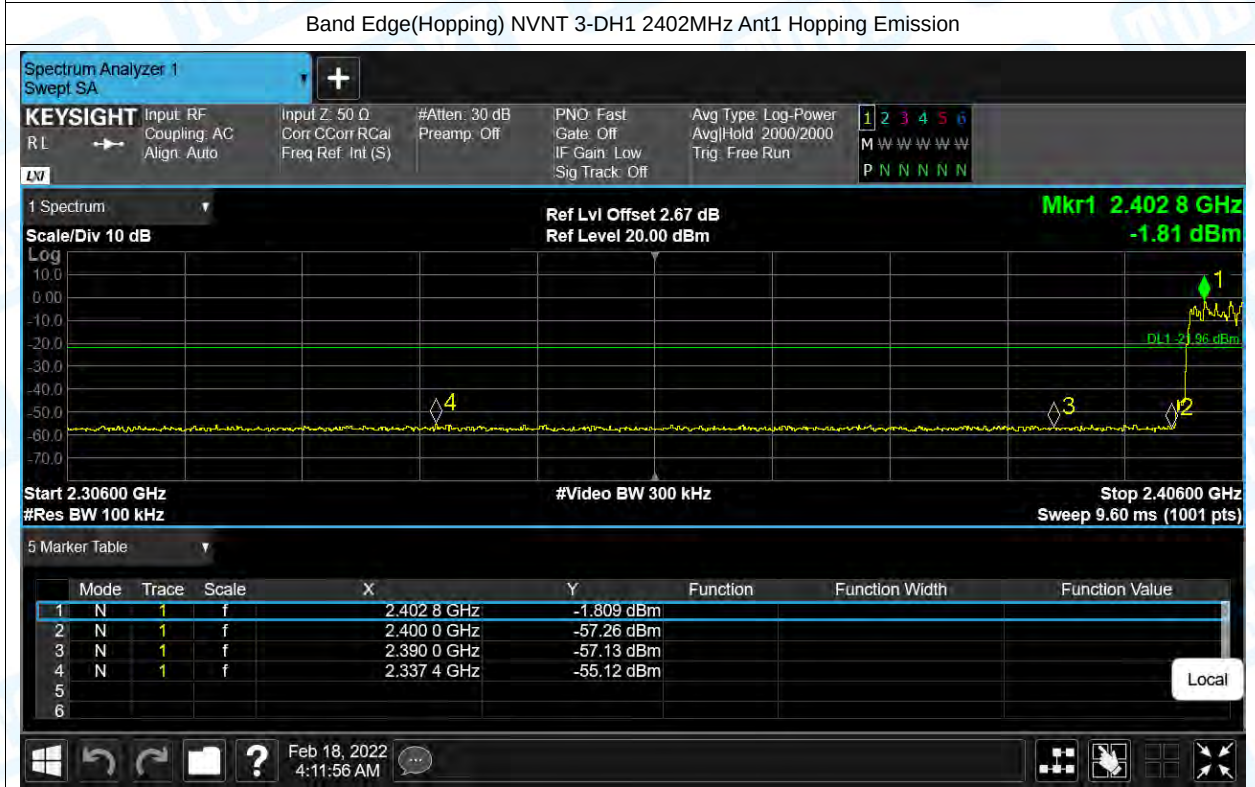
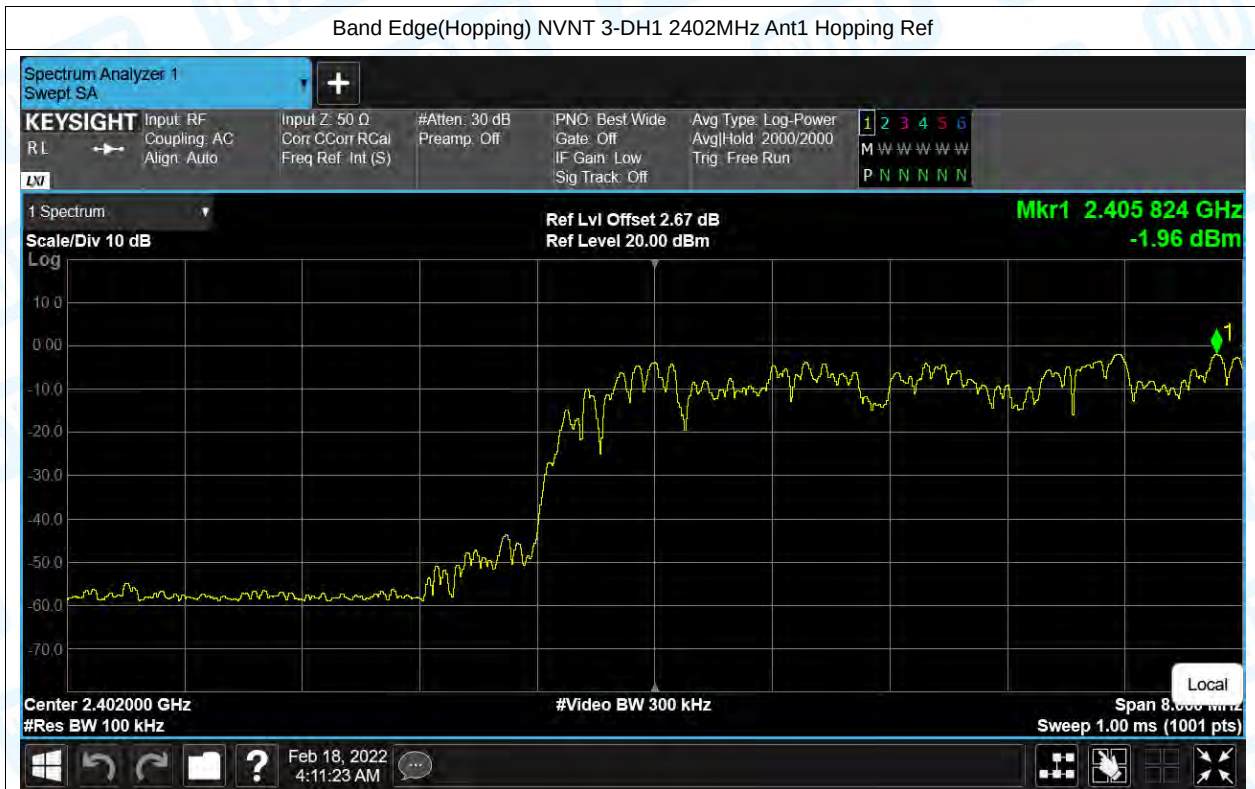


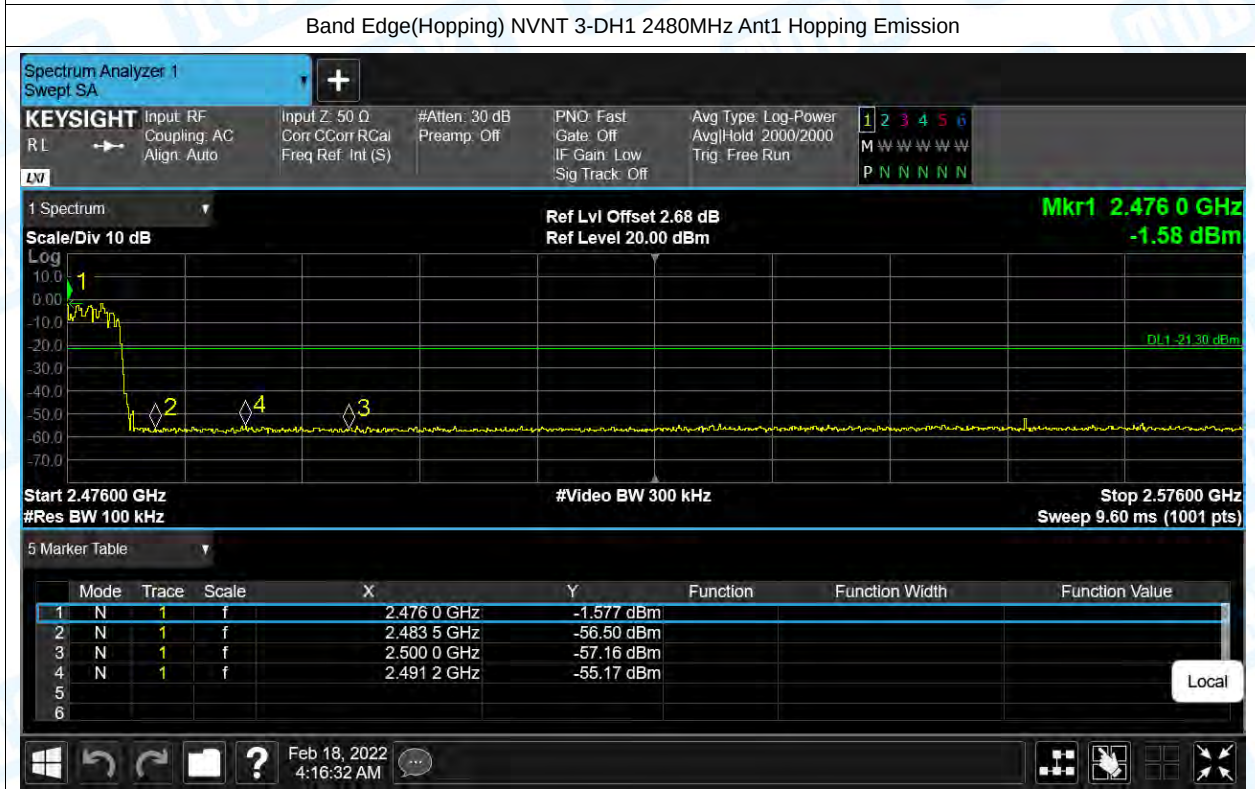
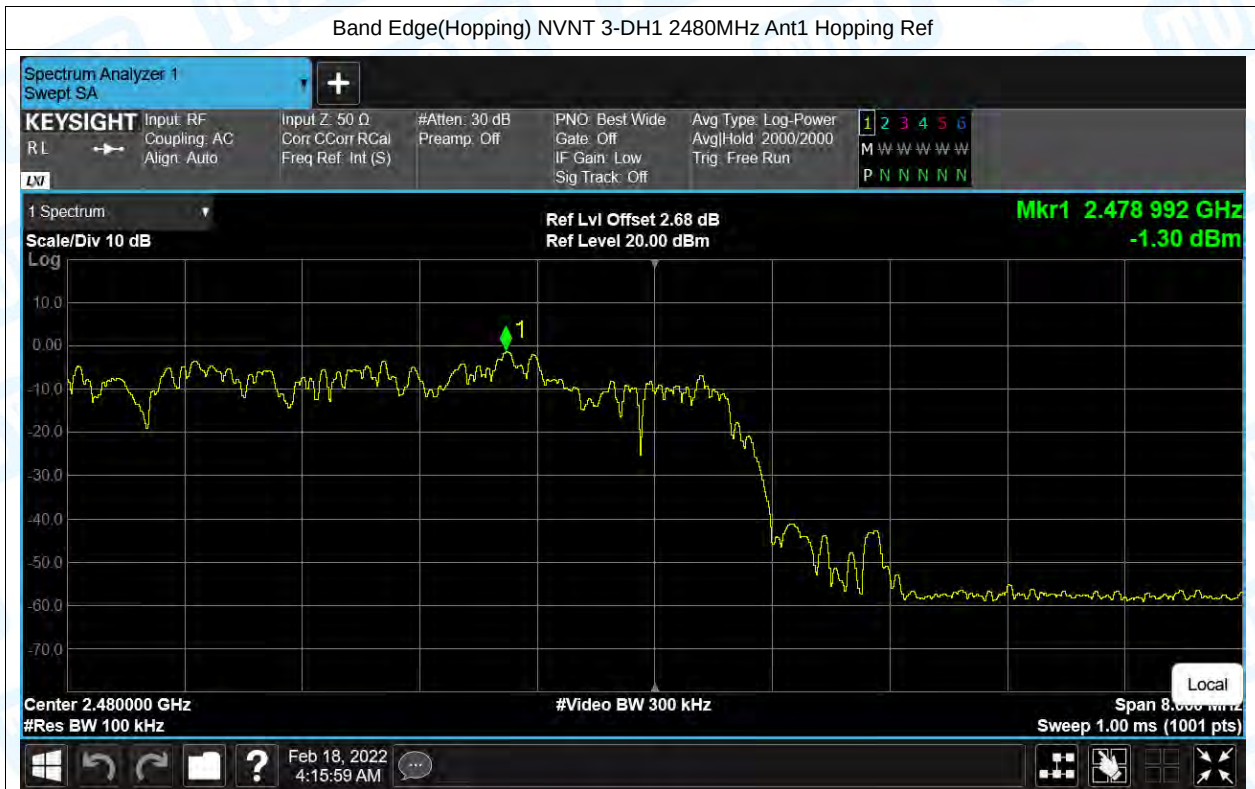
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission

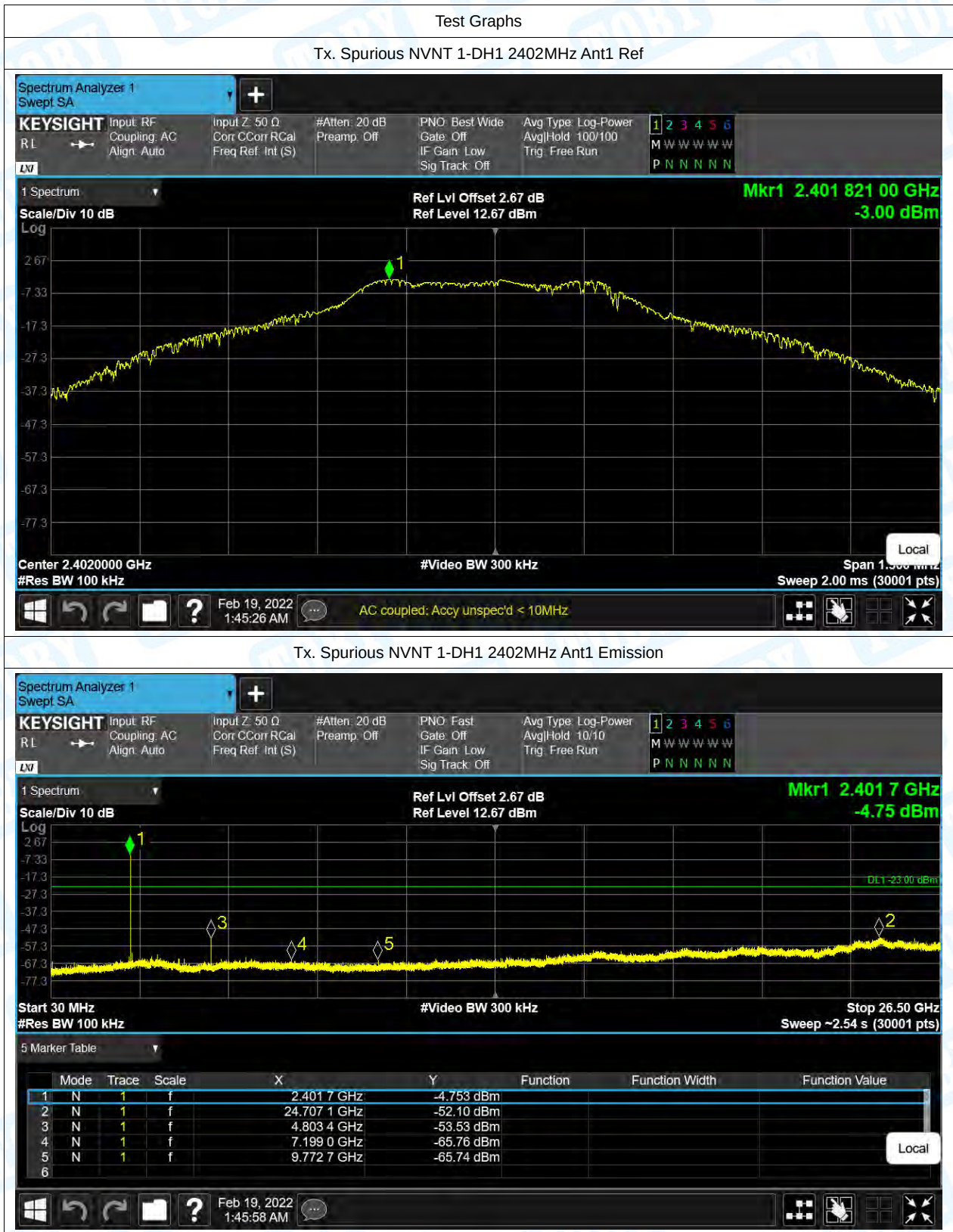




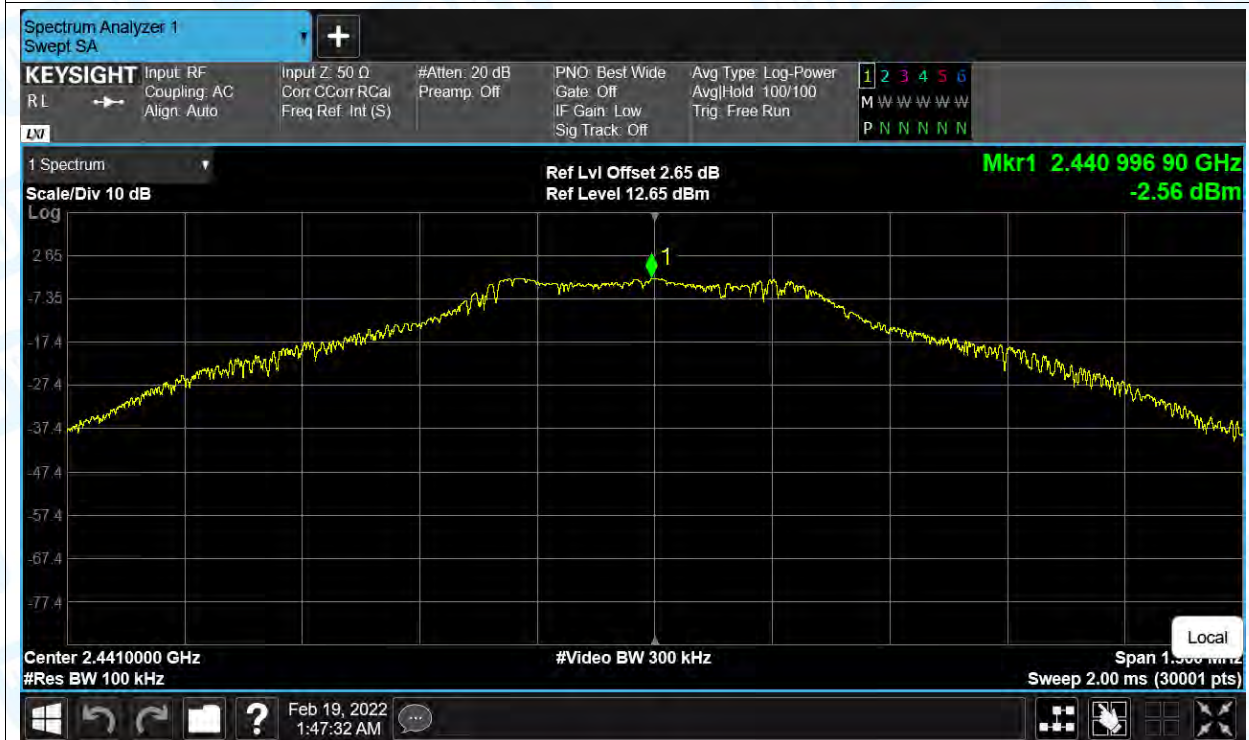


Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-49.1	-20	Pass
NVNT	1-DH1	2441	Ant1	-45	-20	Pass
NVNT	1-DH1	2480	Ant1	-43.96	-20	Pass
NVNT	2-DH1	2402	Ant1	-50.49	-20	Pass
NVNT	2-DH1	2441	Ant1	-45.91	-20	Pass
NVNT	2-DH1	2480	Ant1	-48.14	-20	Pass
NVNT	3-DH1	2402	Ant1	-50.14	-20	Pass
NVNT	3-DH1	2441	Ant1	-46.17	-20	Pass
NVNT	3-DH1	2480	Ant1	-50.09	-20	Pass

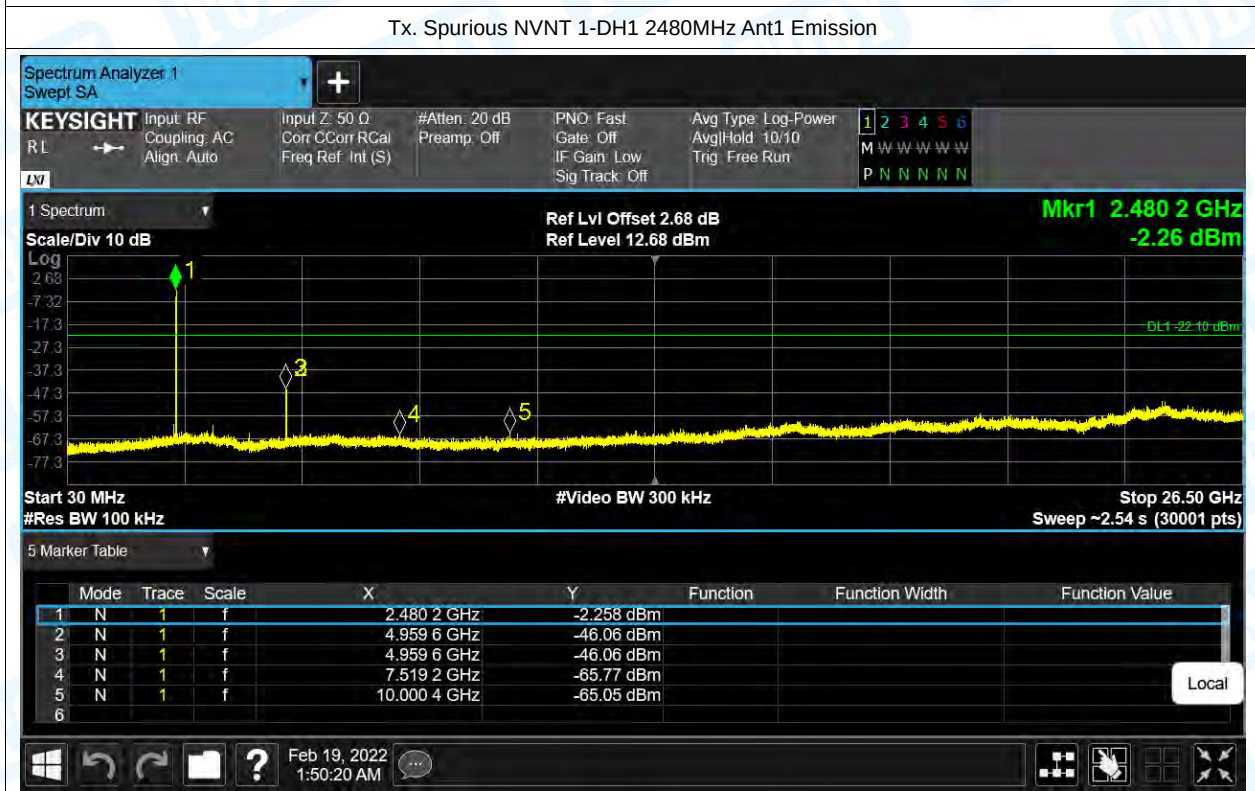
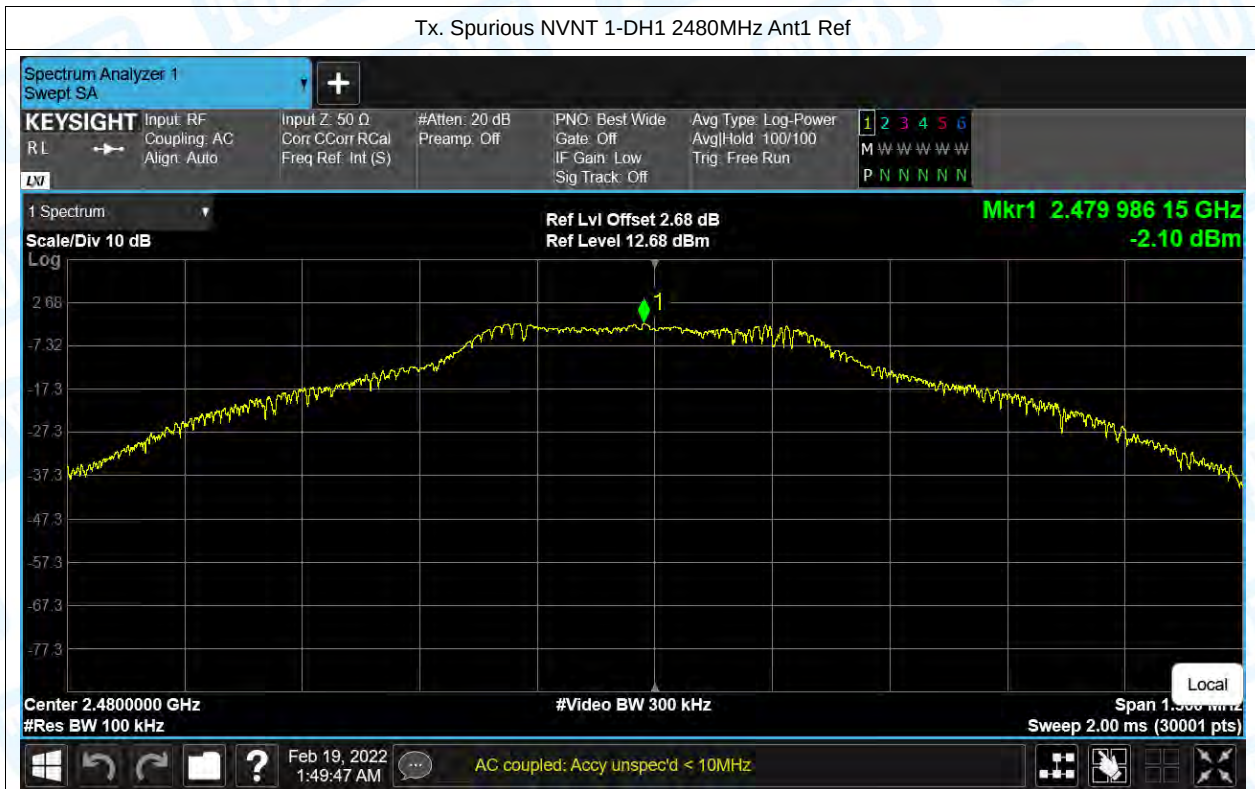


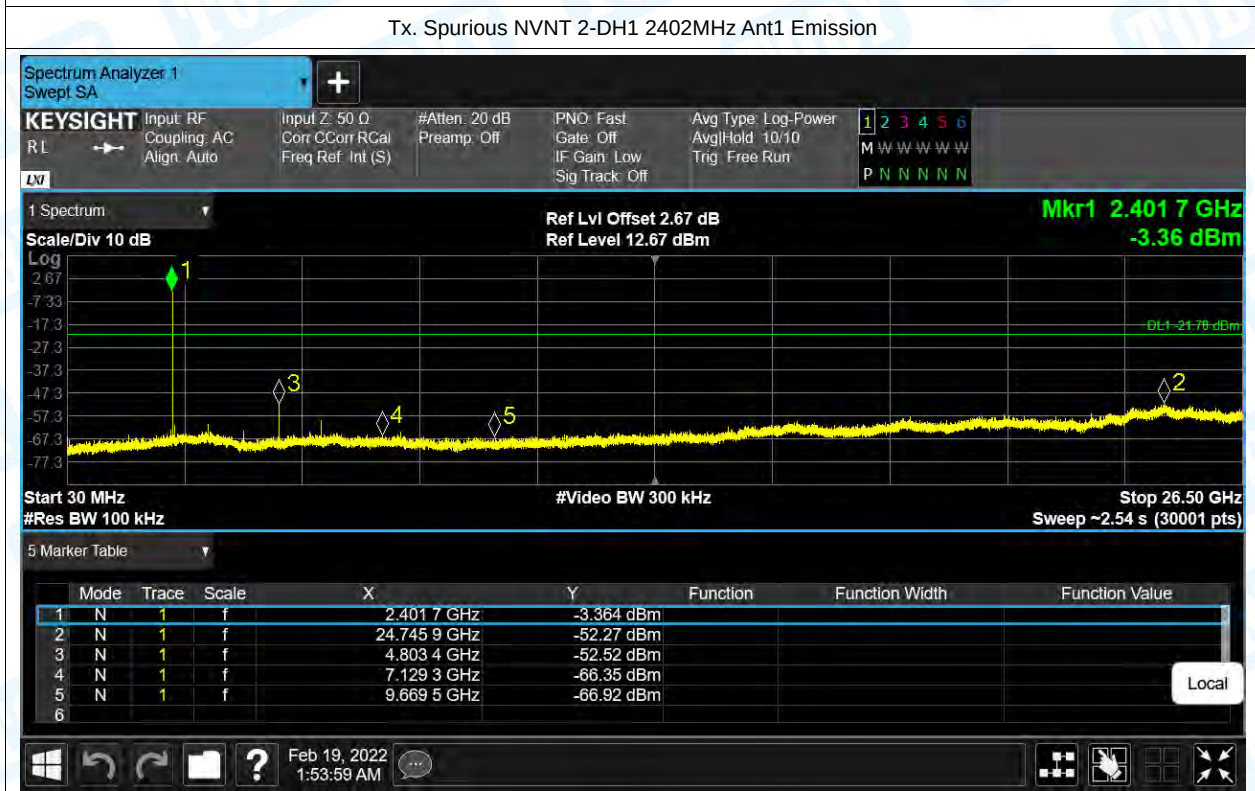
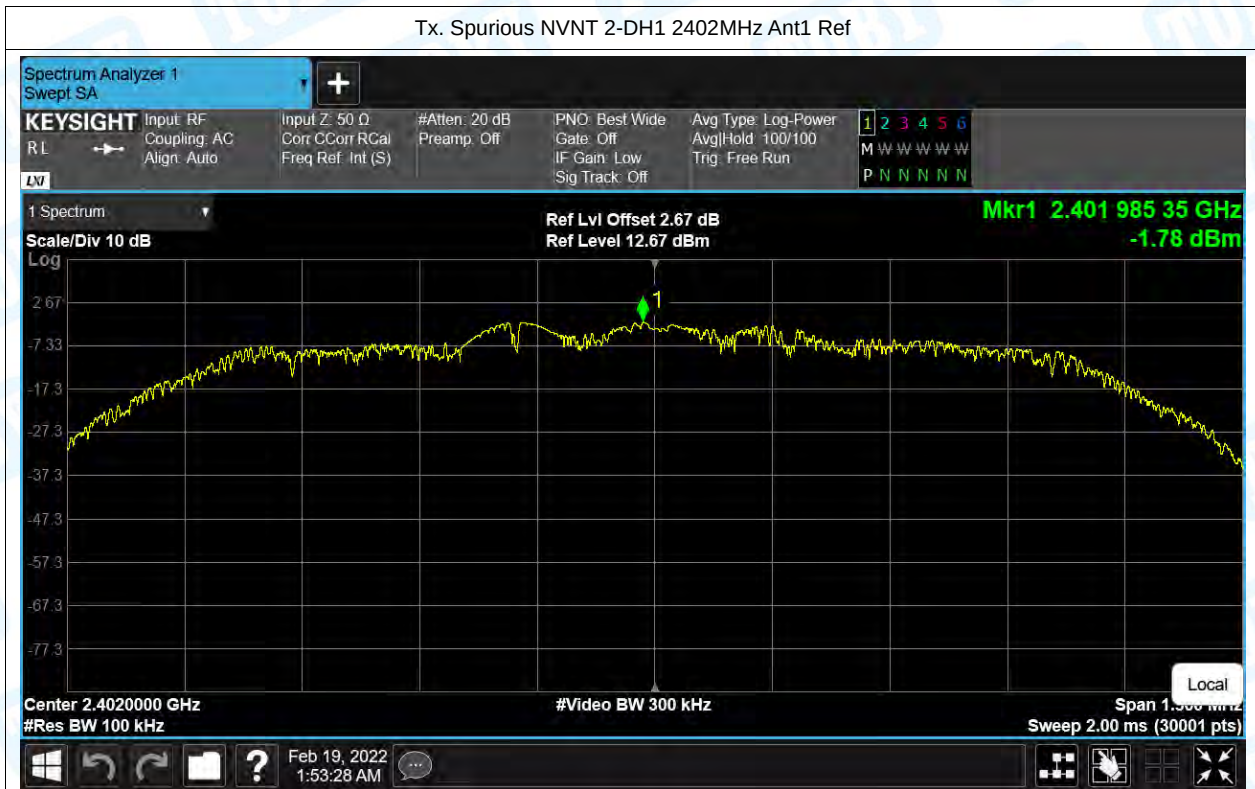
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref

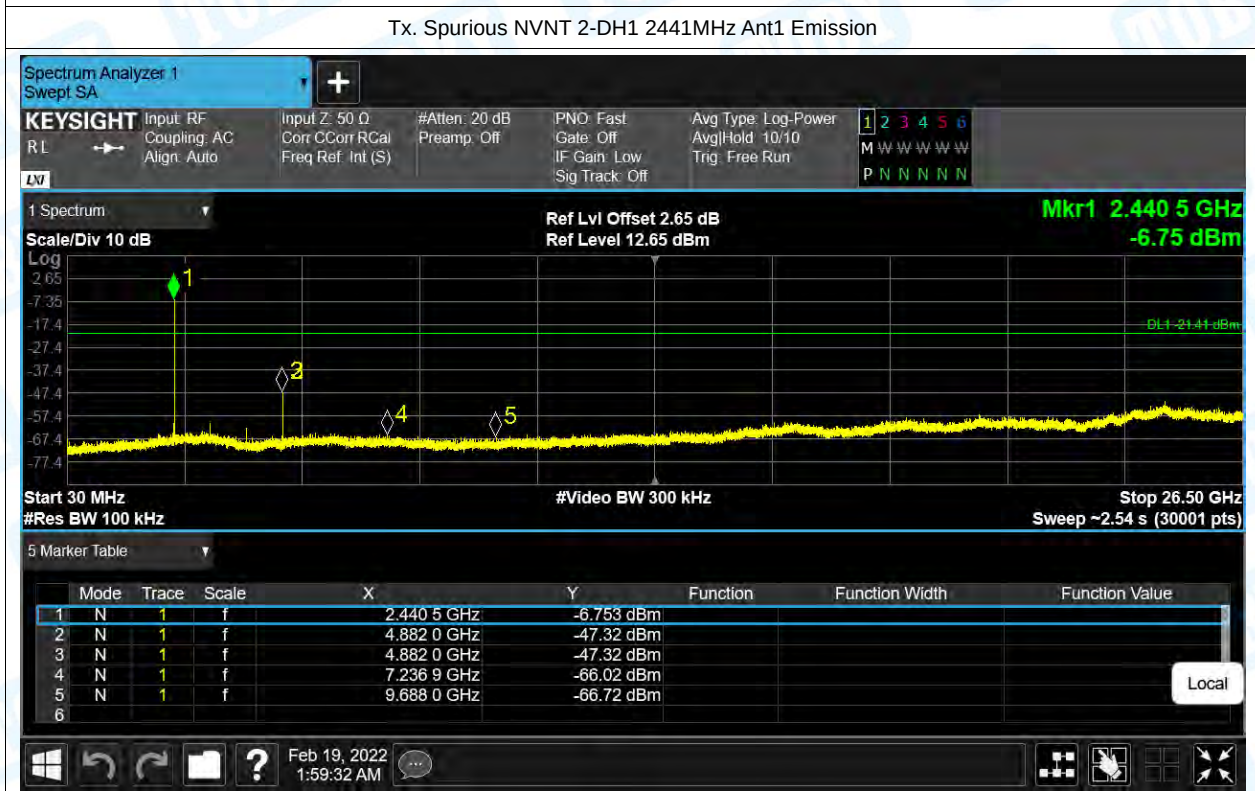
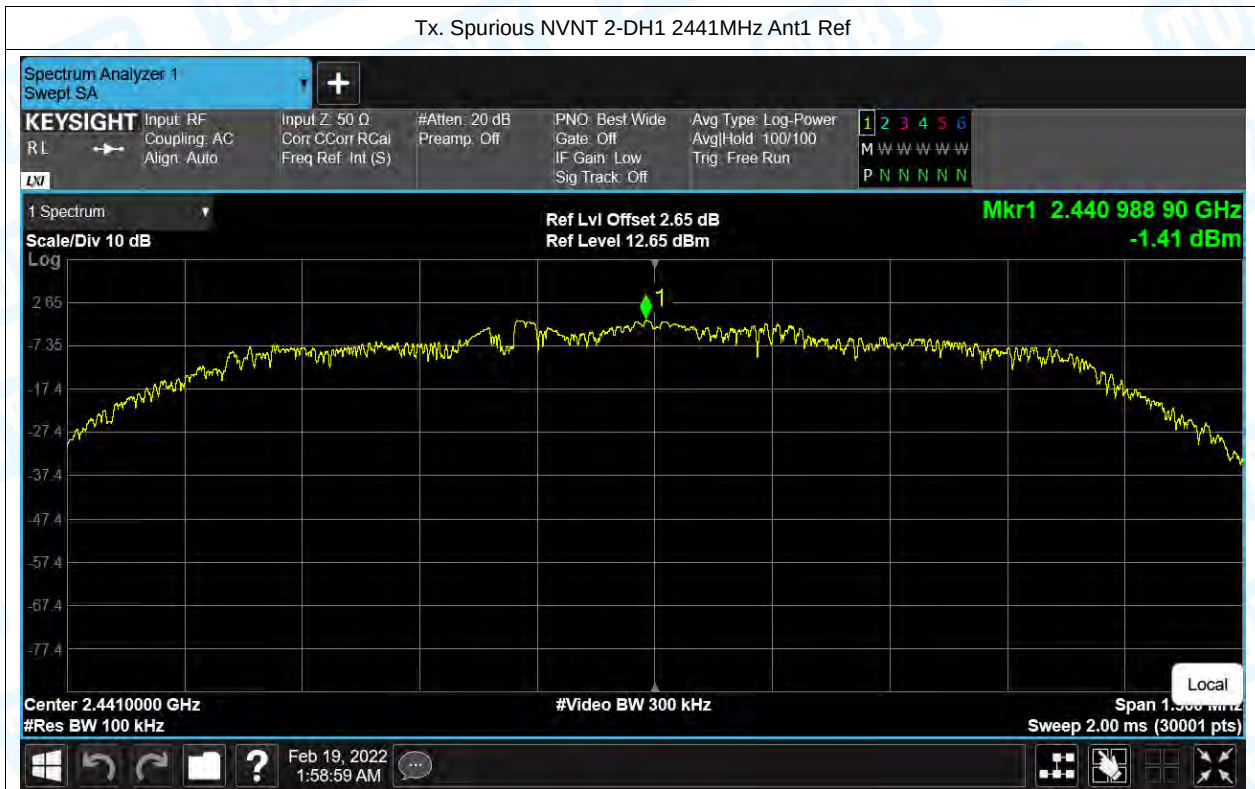


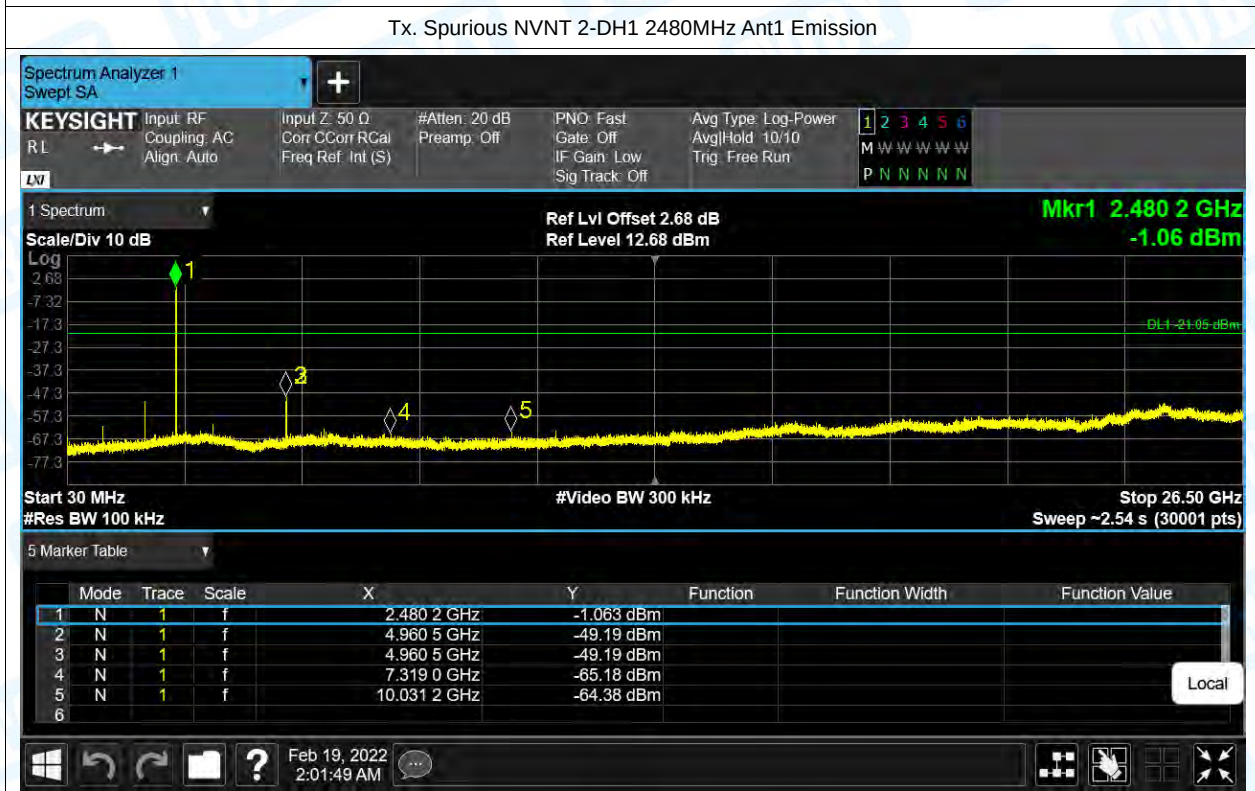
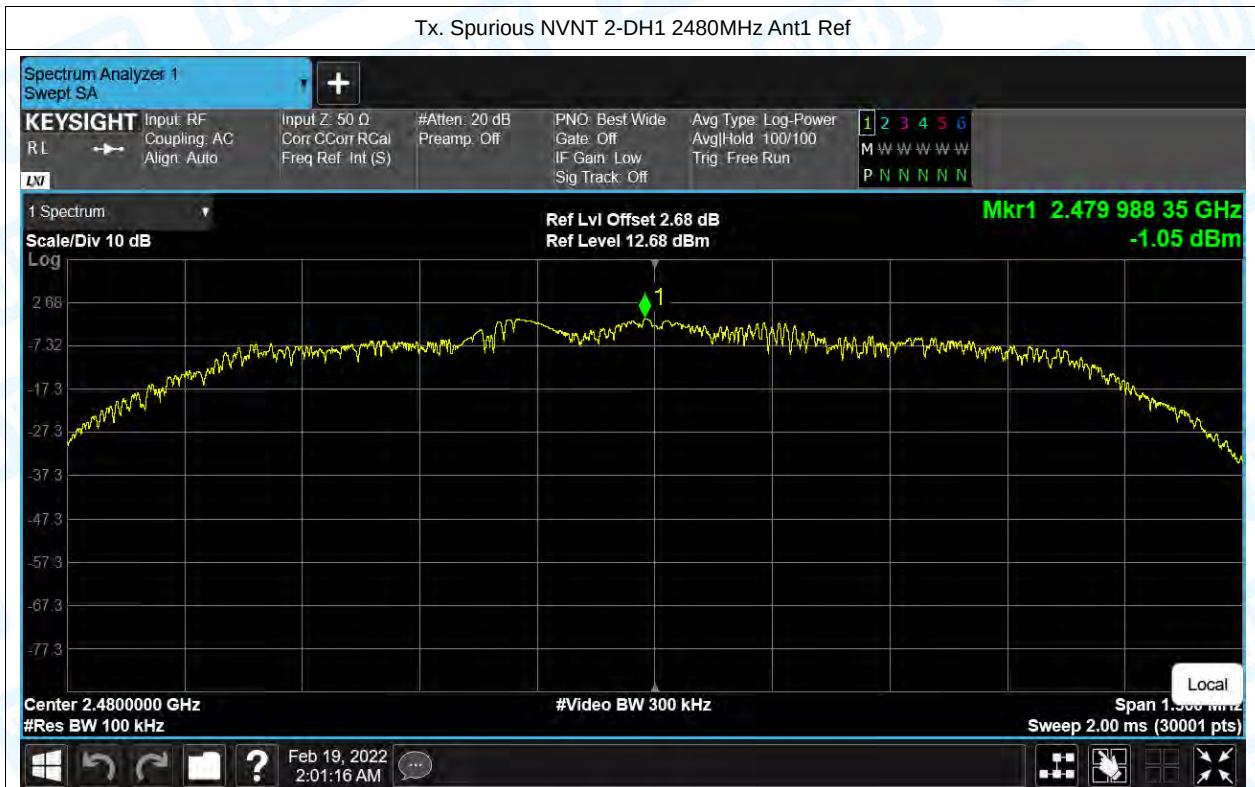
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission









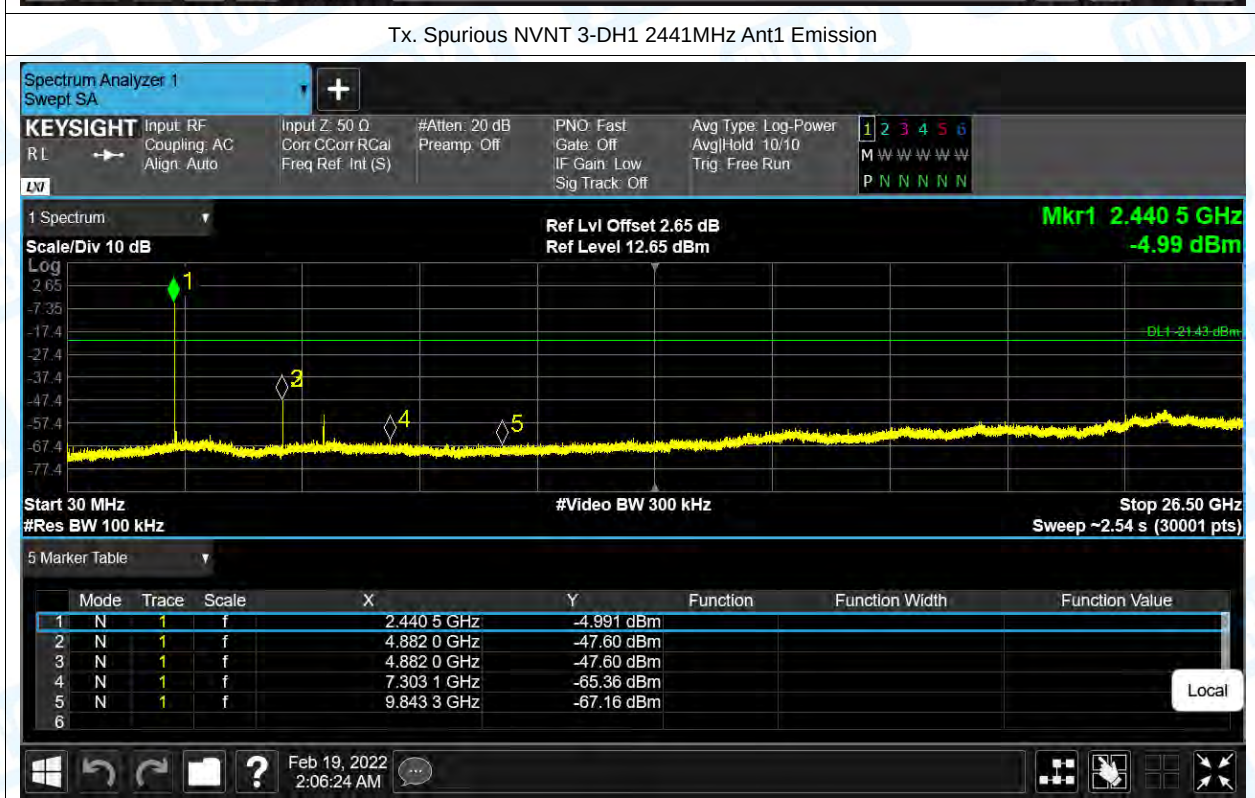
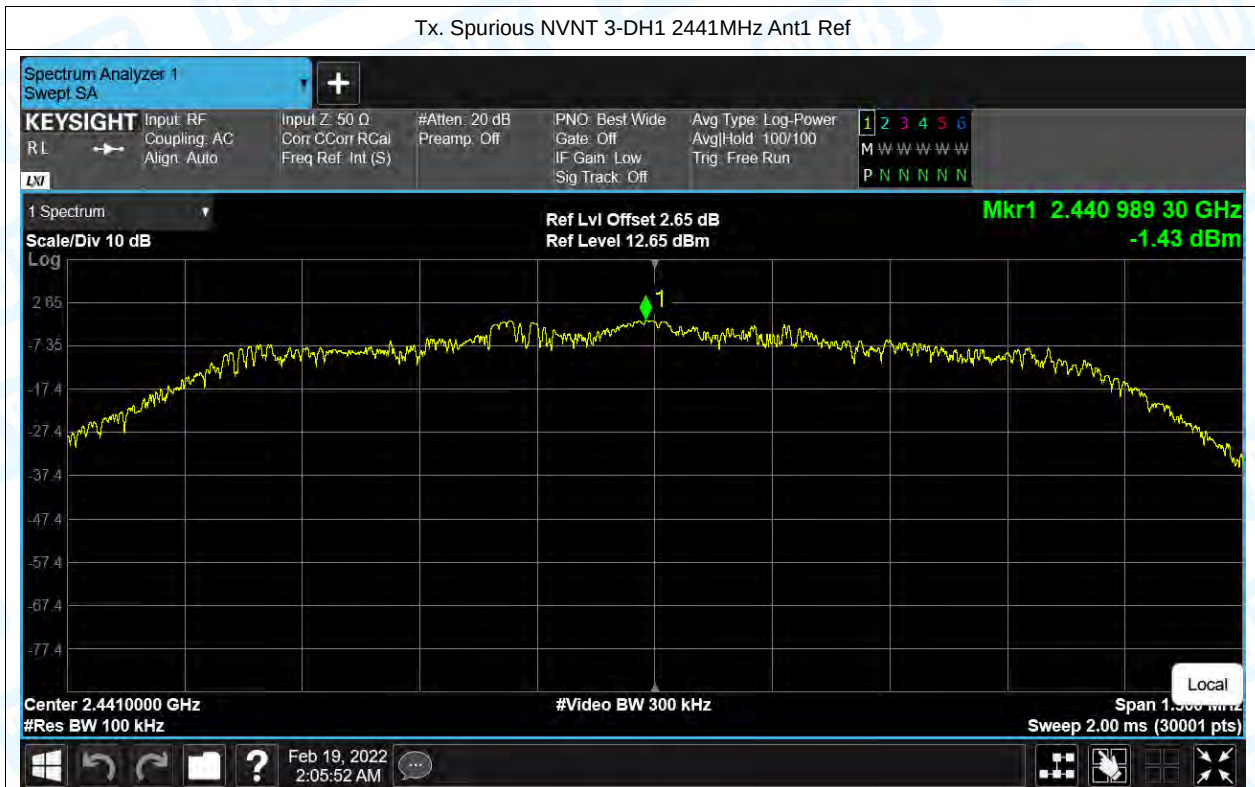


Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission

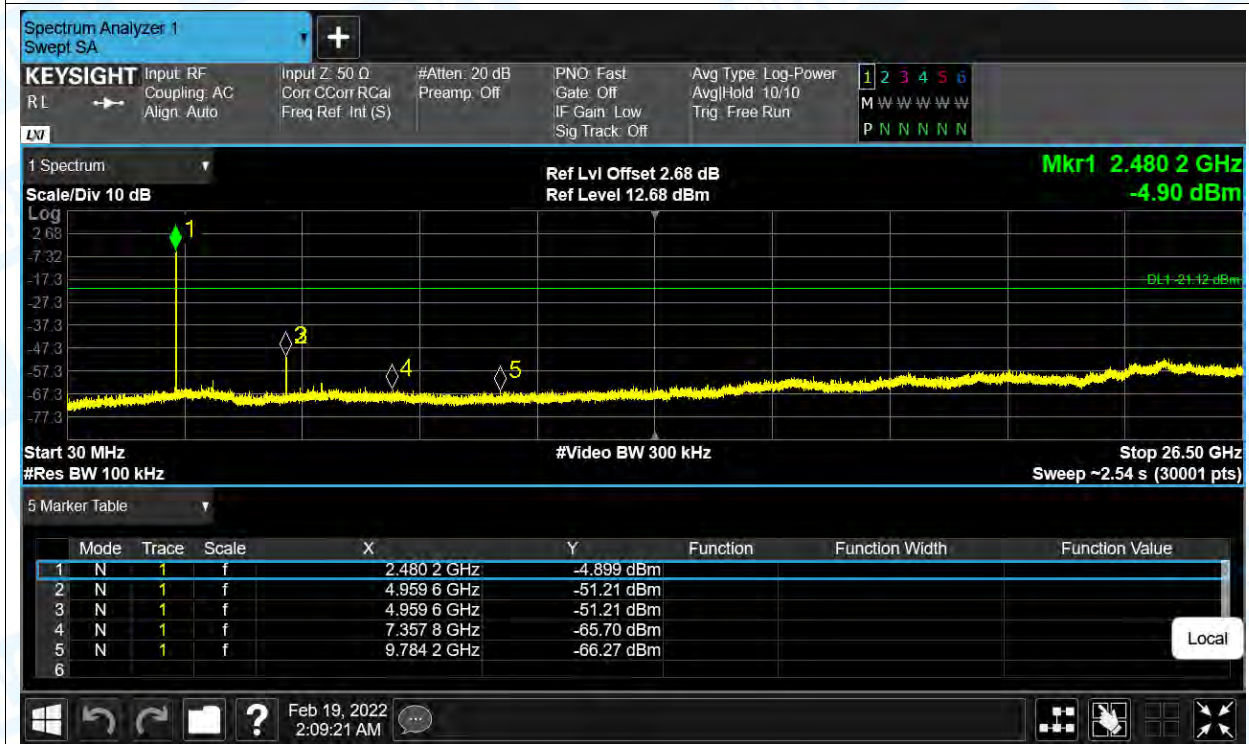




Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

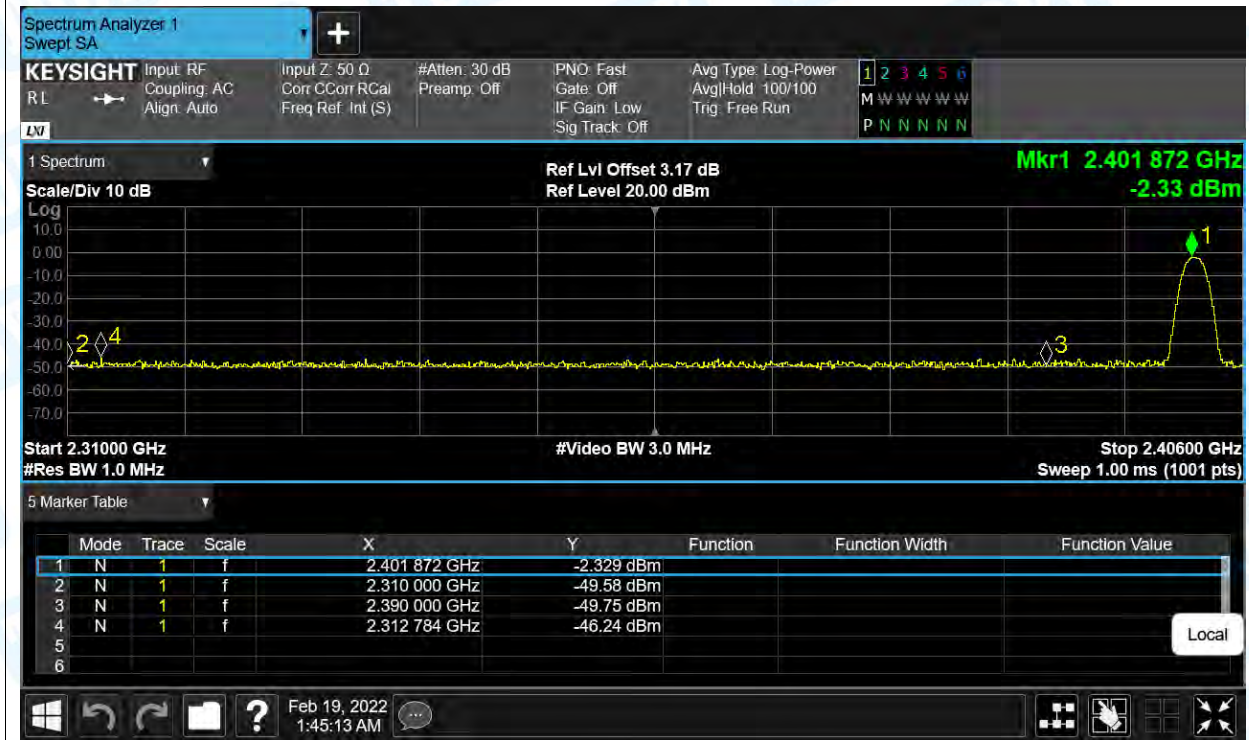


Restrict Band

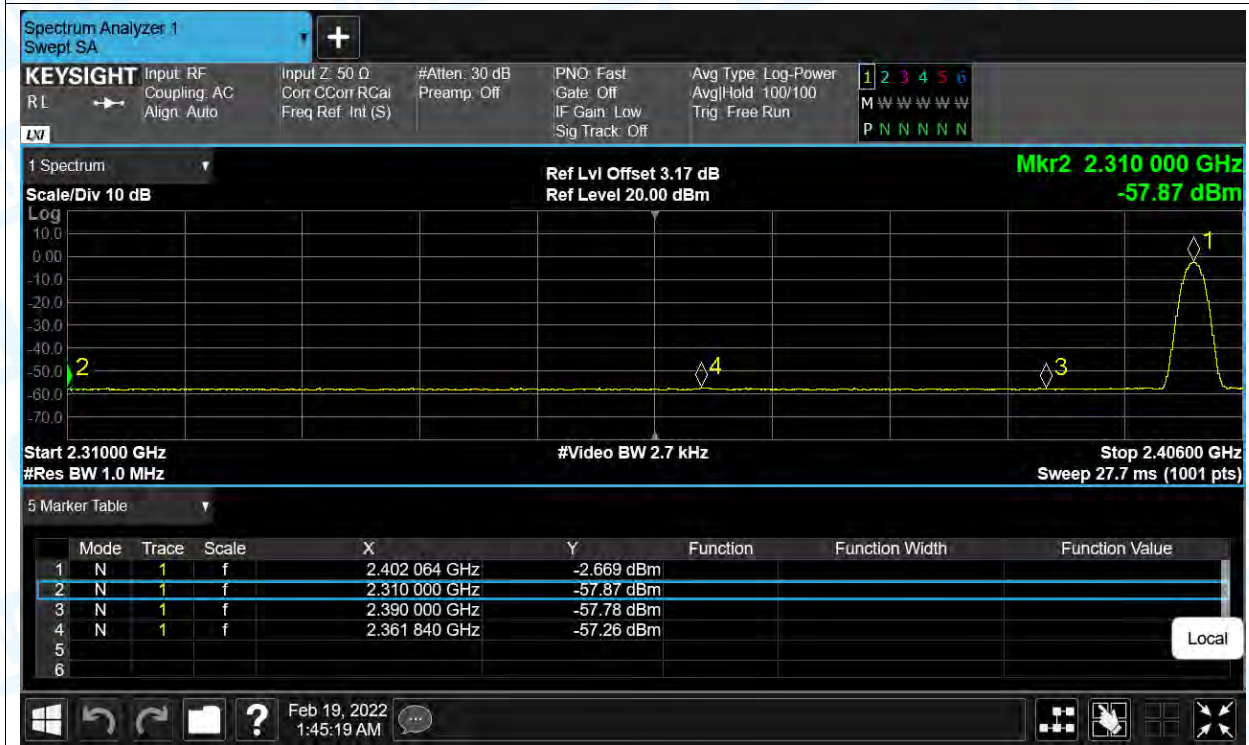
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-49.58	2	47.68	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-57.87	2	39.39	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2312.784	-46.24	2	51.02	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2361.84	-57.26	2	40	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.08	2	49.18	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-57.78	2	39.48	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-47.33	2	49.93	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-57.57	2	39.69	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2488.096	-45.64	2	51.62	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.8	-57.26	2	40	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-49.6	2	47.66	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-57.83	2	39.43	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-49.74	2	47.52	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-57.98	2	39.28	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2361.936	-46.58	2	50.68	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2362.128	-56.91	2	40.35	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-50.68	2	46.58	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-57.95	2	39.31	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-47	2	50.26	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-57.34	2	39.92	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2499.496	-45.32	2	51.94	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.656	-56.81	2	40.45	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-48.29	2	48.97	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-57.68	2	39.58	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-48.43	2	48.83	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-57.98	2	39.28	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2322.672	-46.24	2	51.02	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2361.648	-56.94	2	40.32	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-48.25	2	49.01	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-57.99	2	39.27	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.83	2	50.43	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-57.29	2	39.97	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2494.552	-46.13	2	51.13	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2486.32	-57.16	2	40.1	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-48.01	2	49.25	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-57.8	2	39.46	Average	54	Pass

Test Graphs

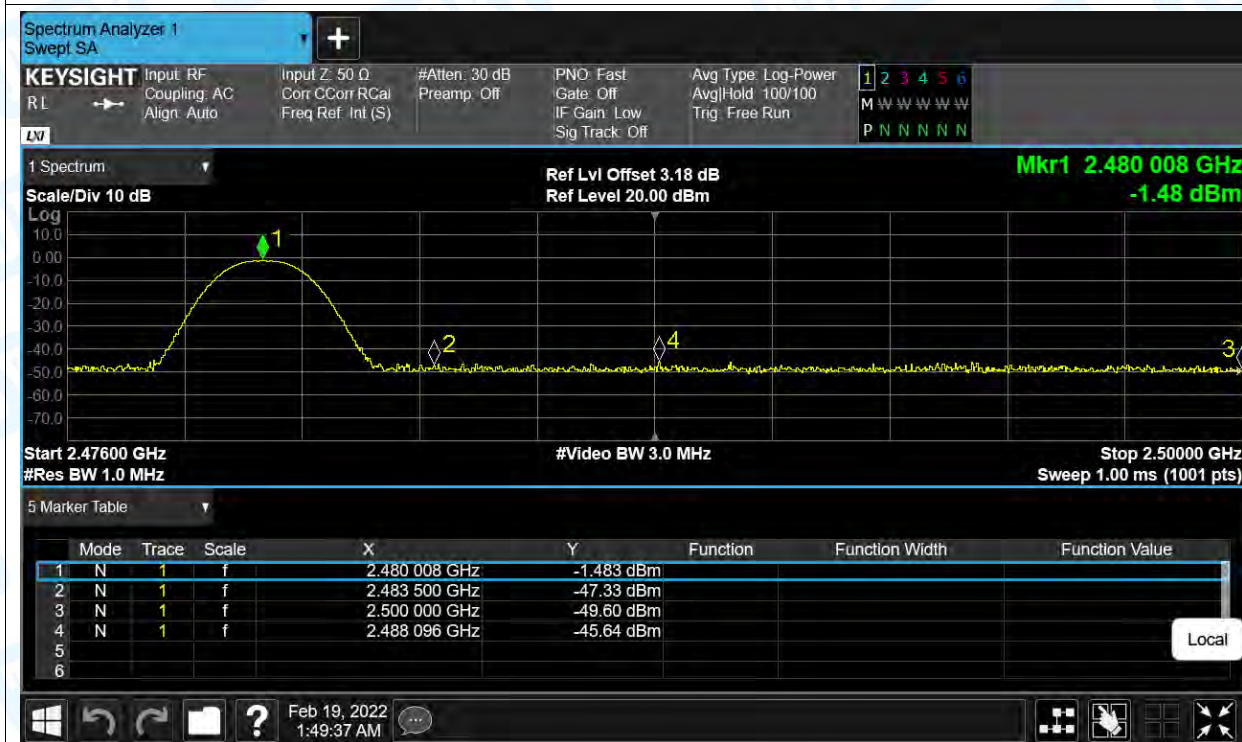
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



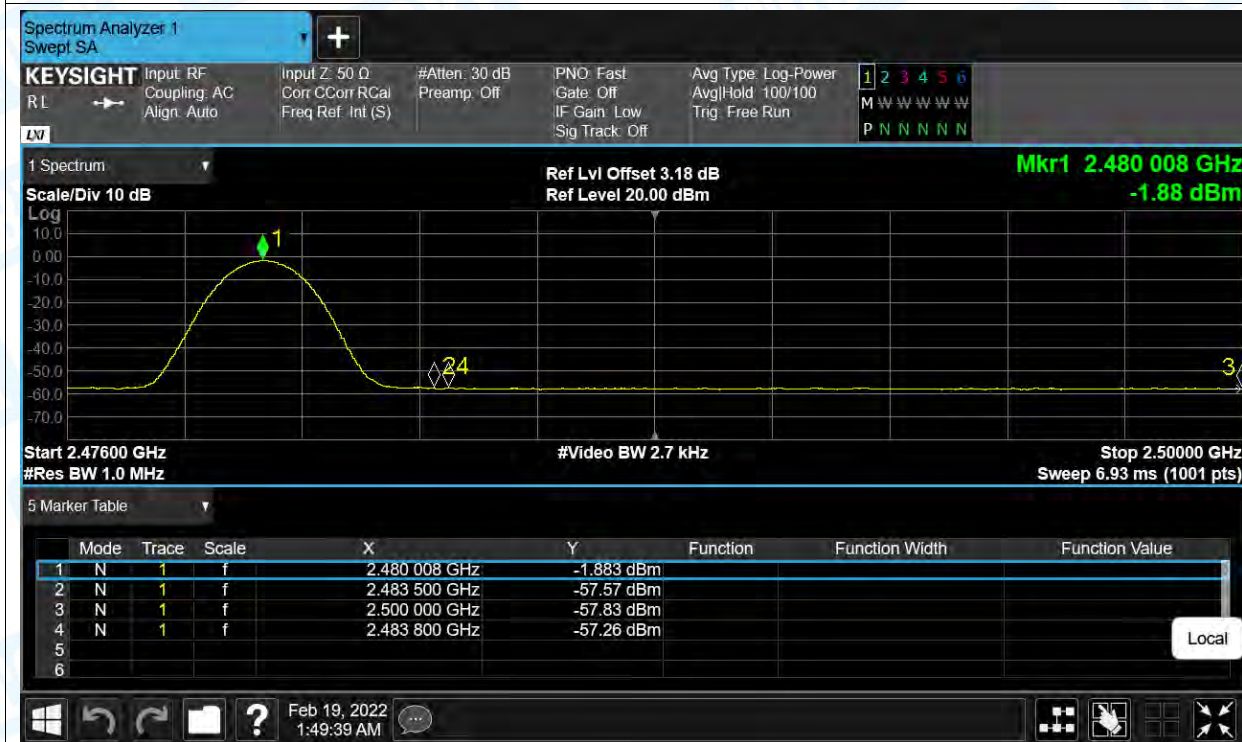
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



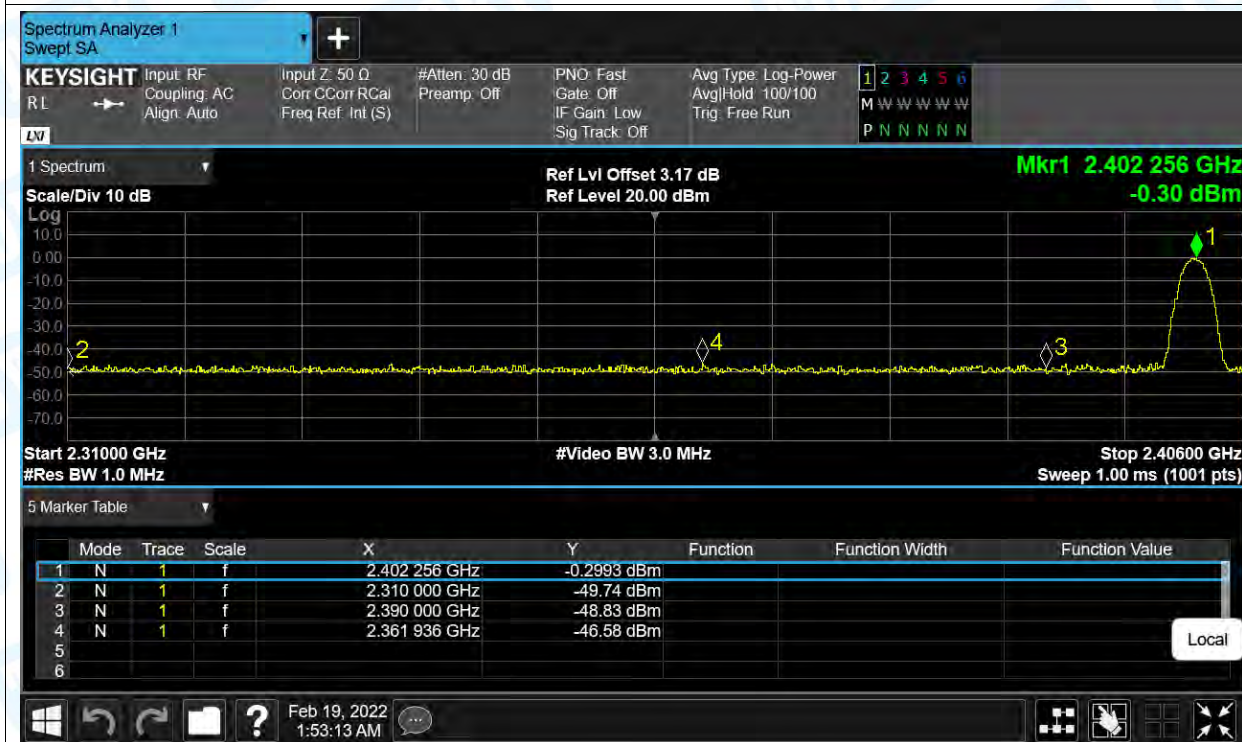
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



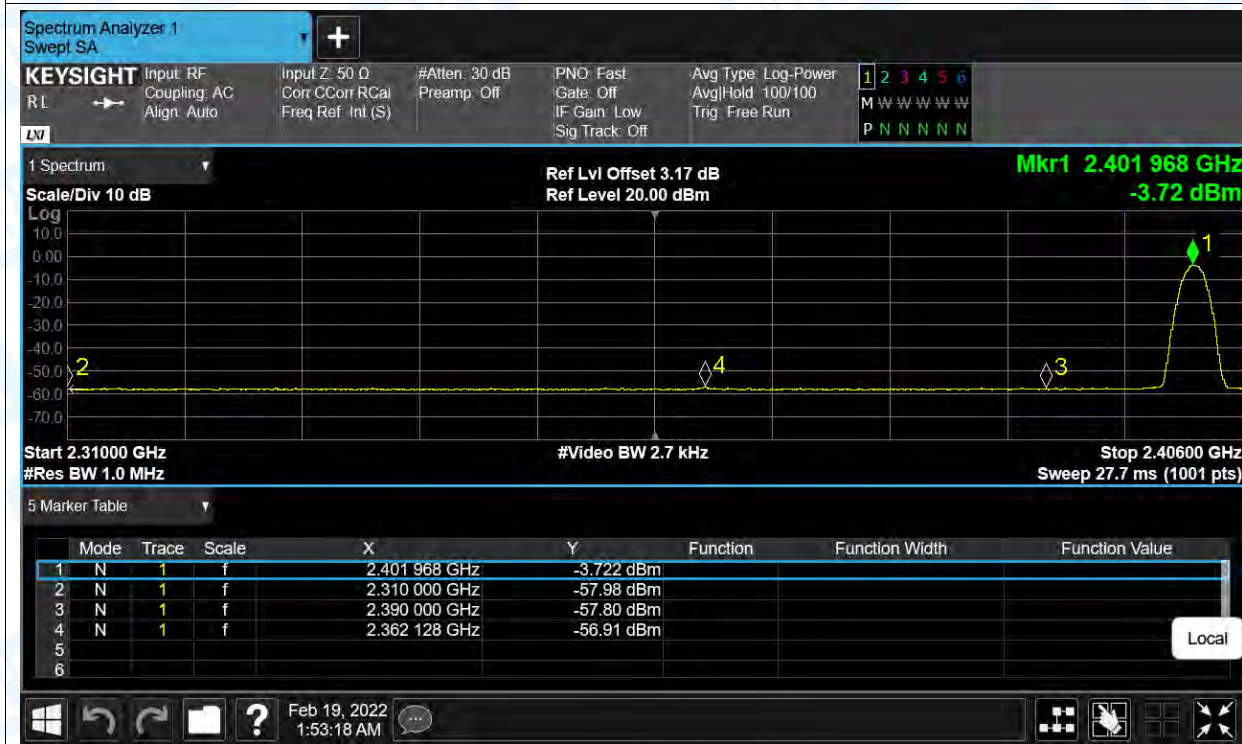
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



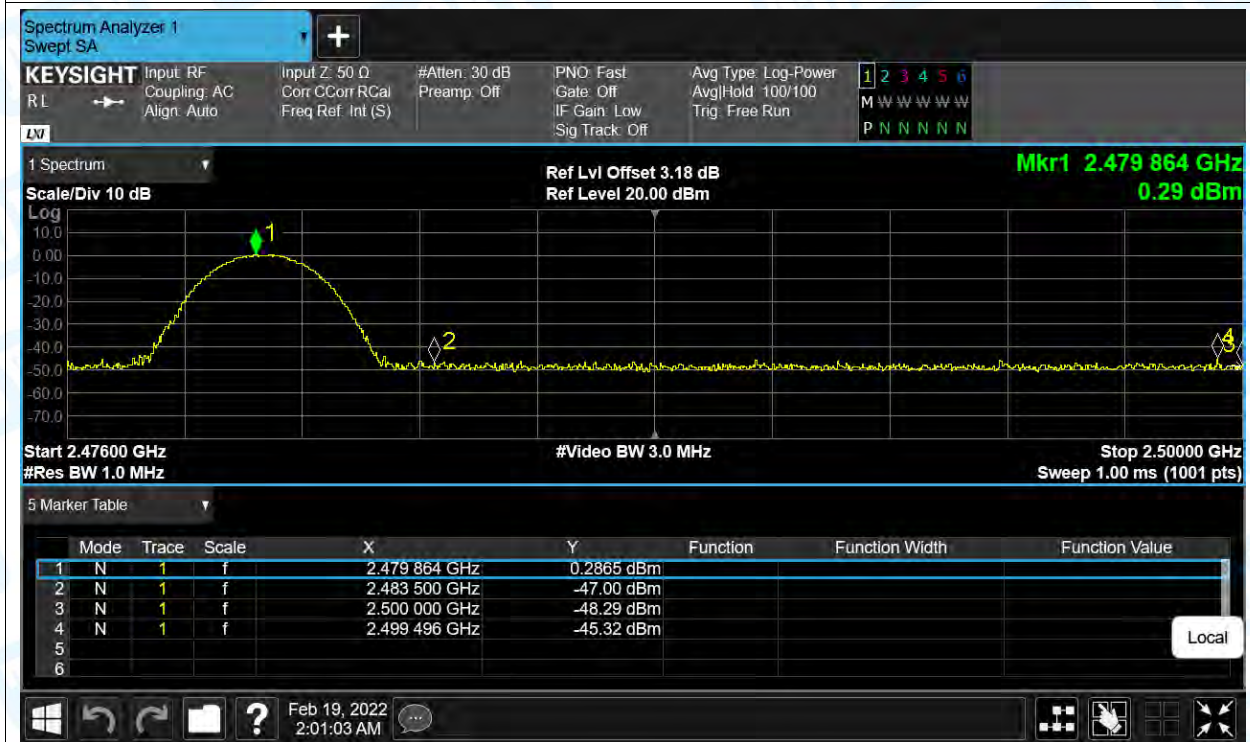
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



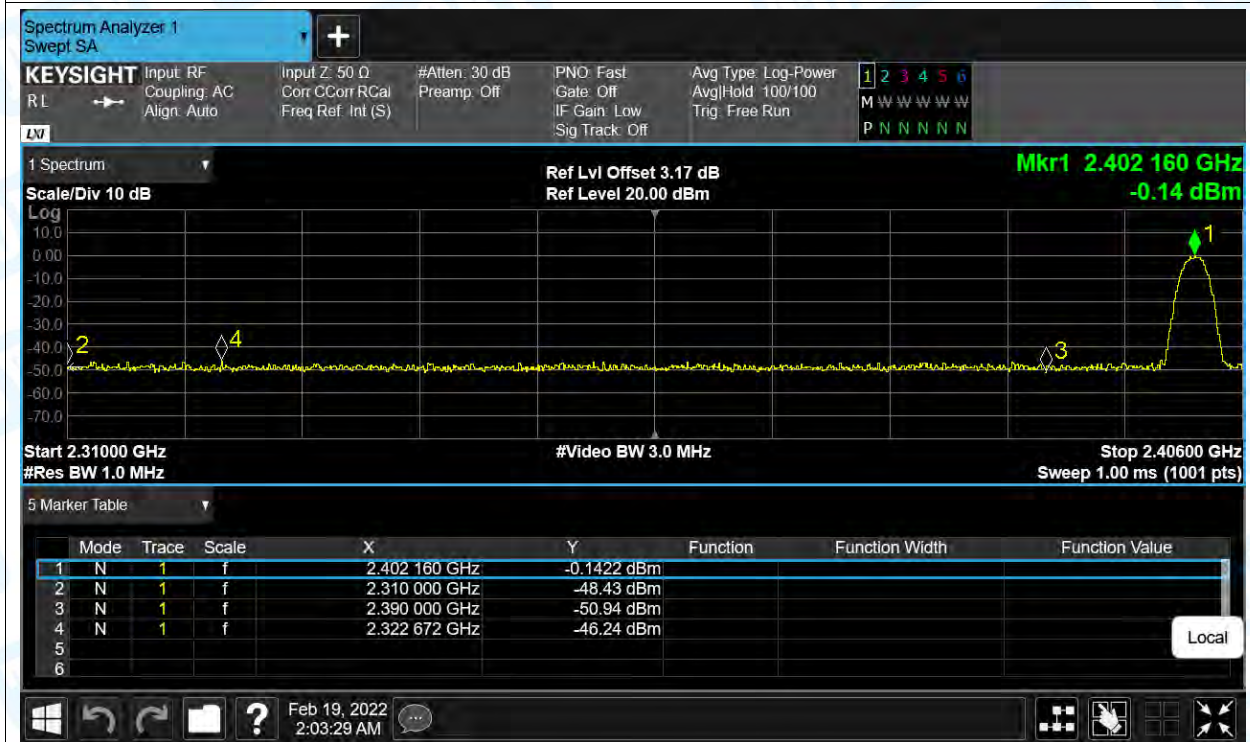
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



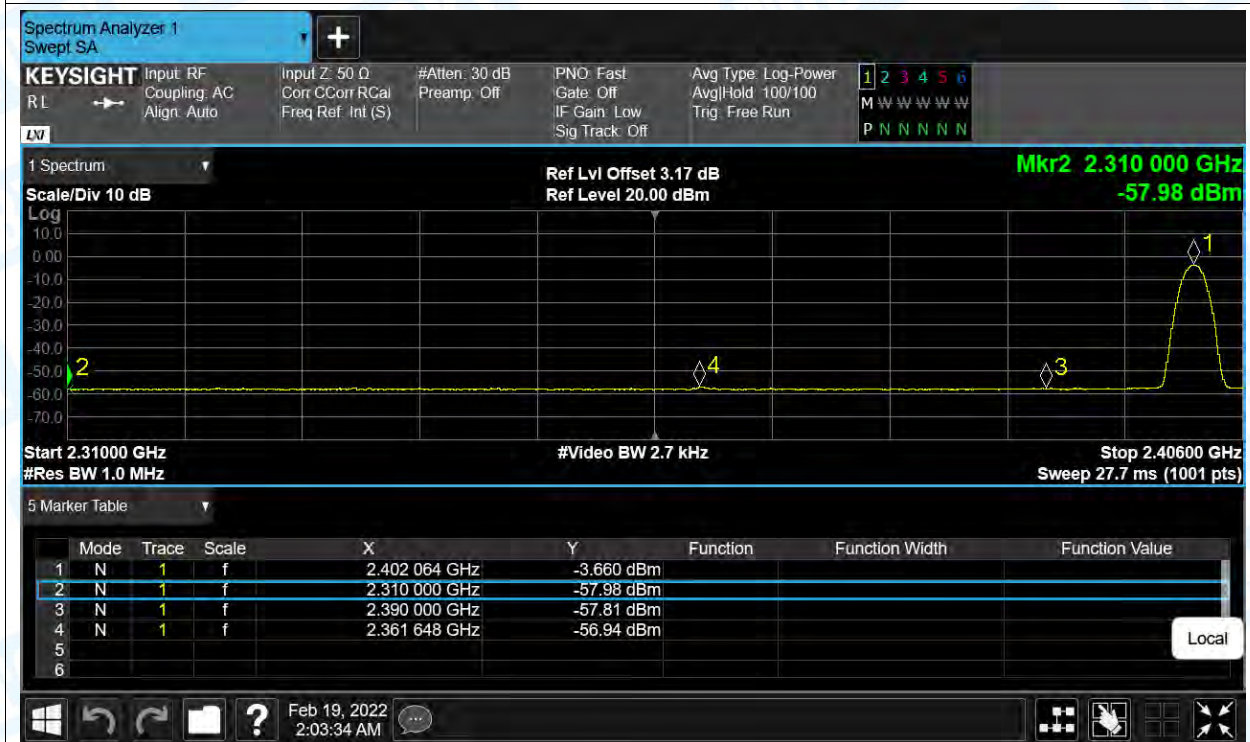
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



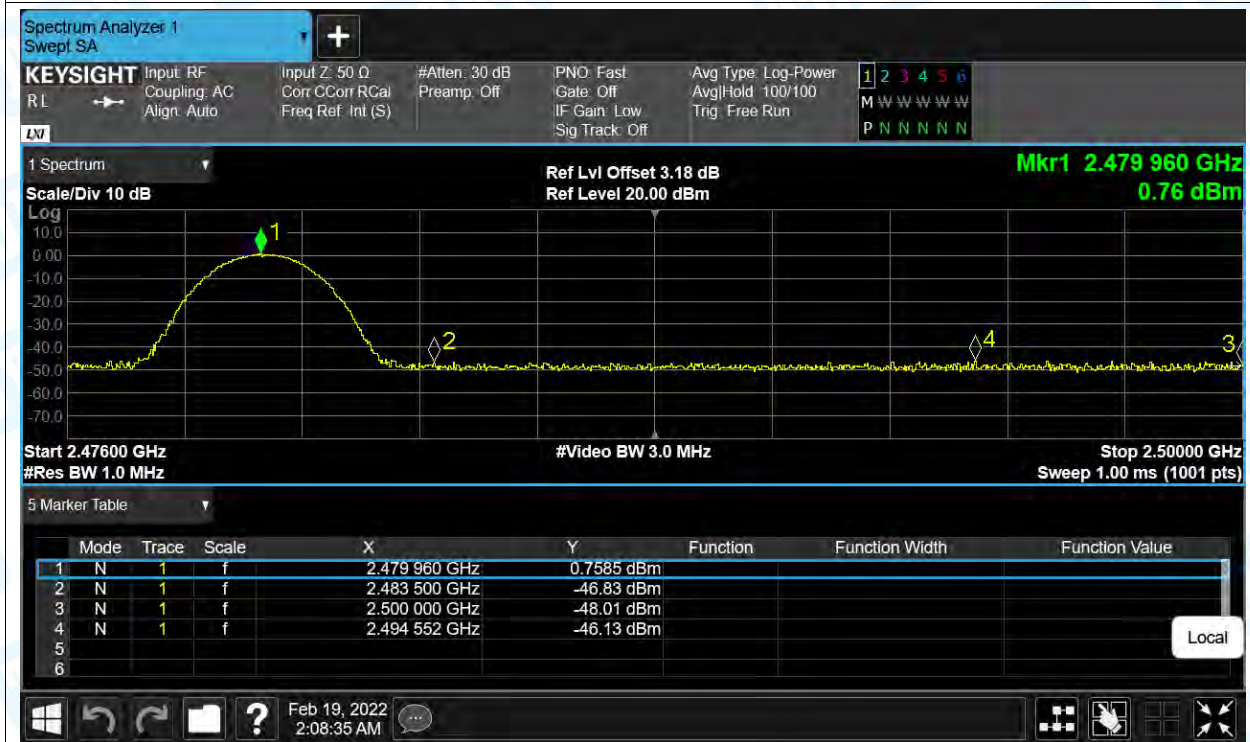
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Average



Dwell Time

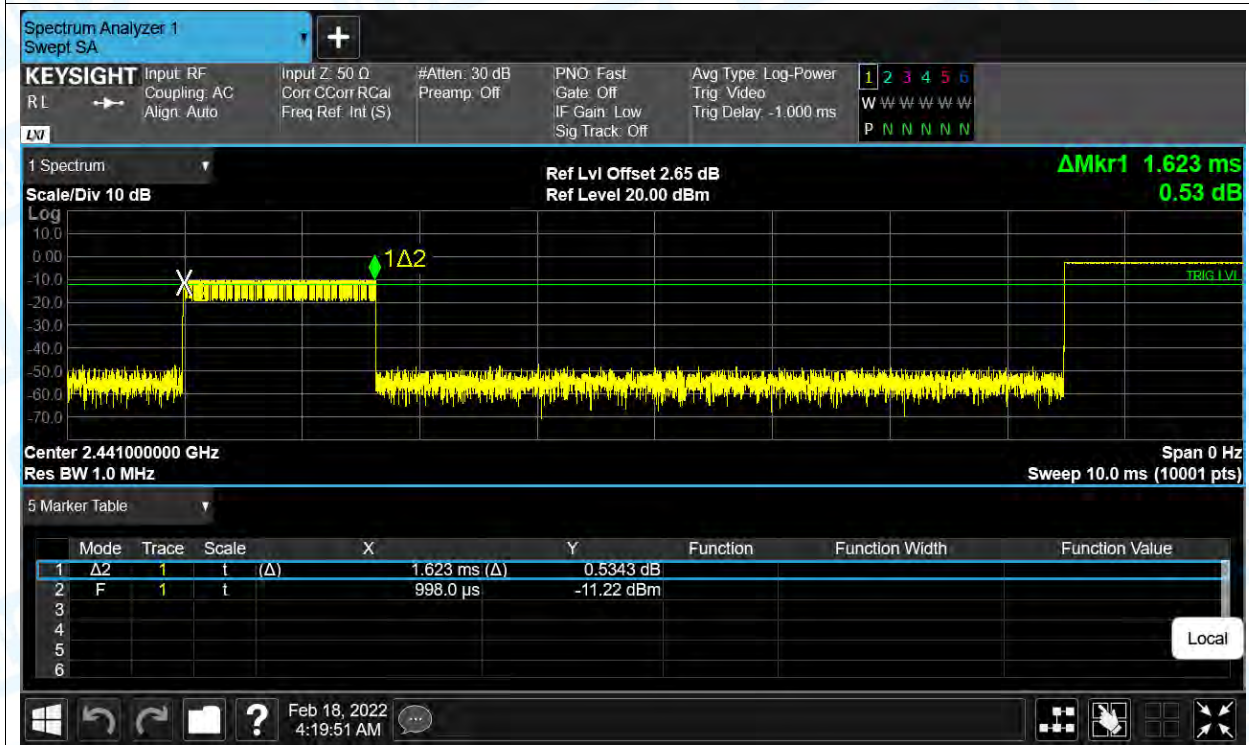
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.623	259.68	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.644	263.04	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.892	308.48	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.391	125.12	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.642	262.72	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.893	308.587	31600	400	Pass

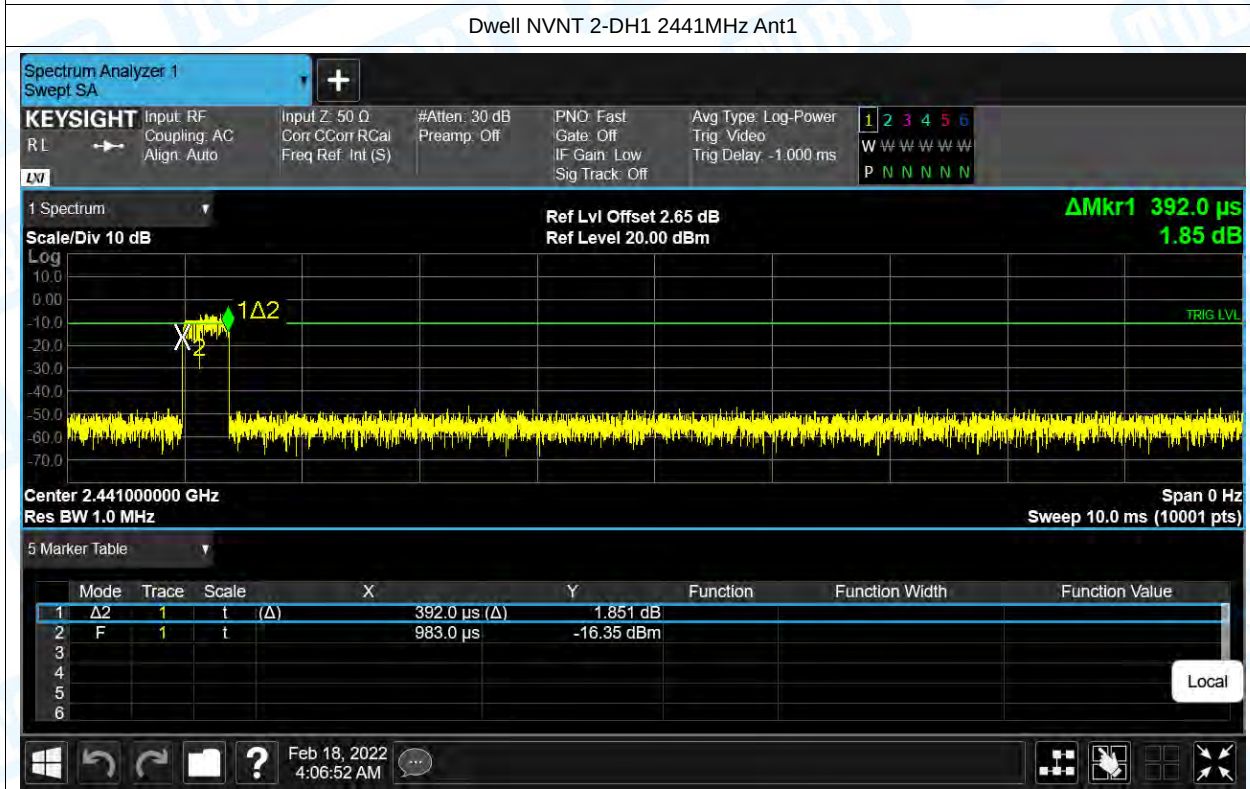
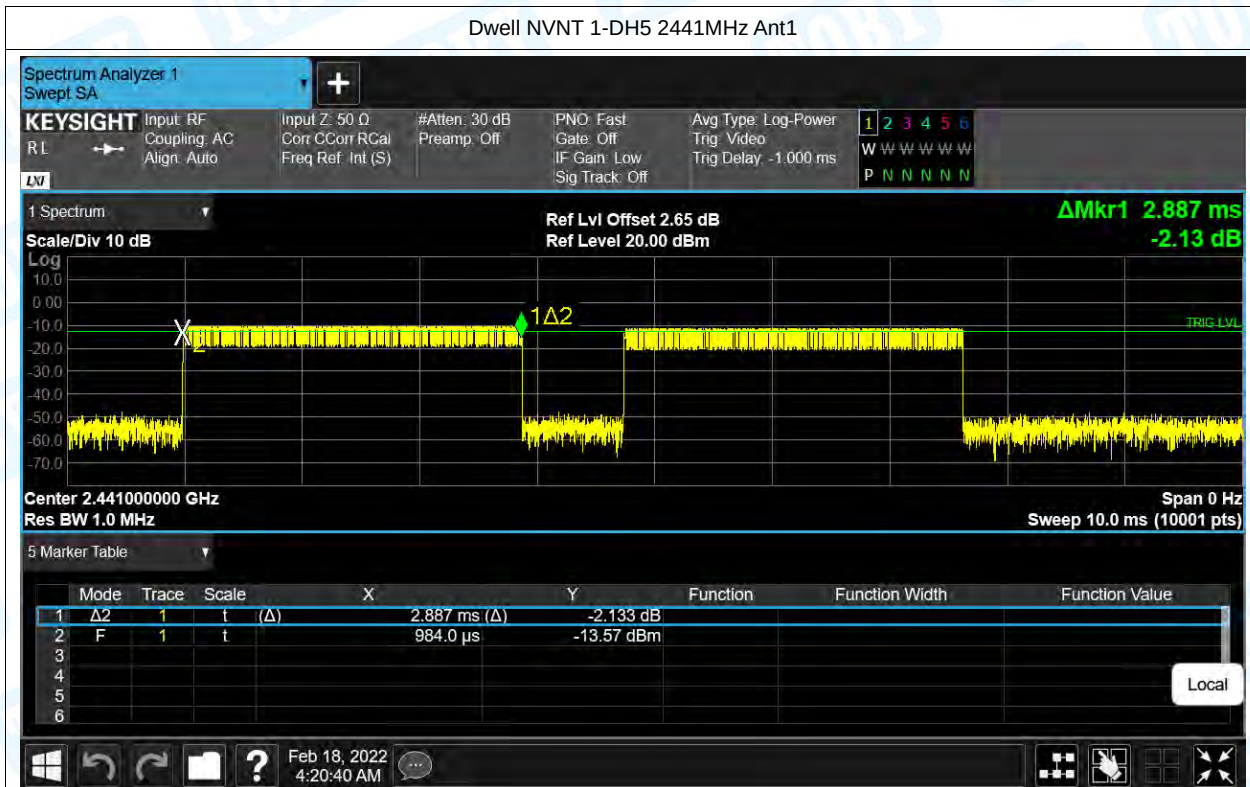
Test Graphs

Dwell NVNT 1-DH1 2441MHz Ant1

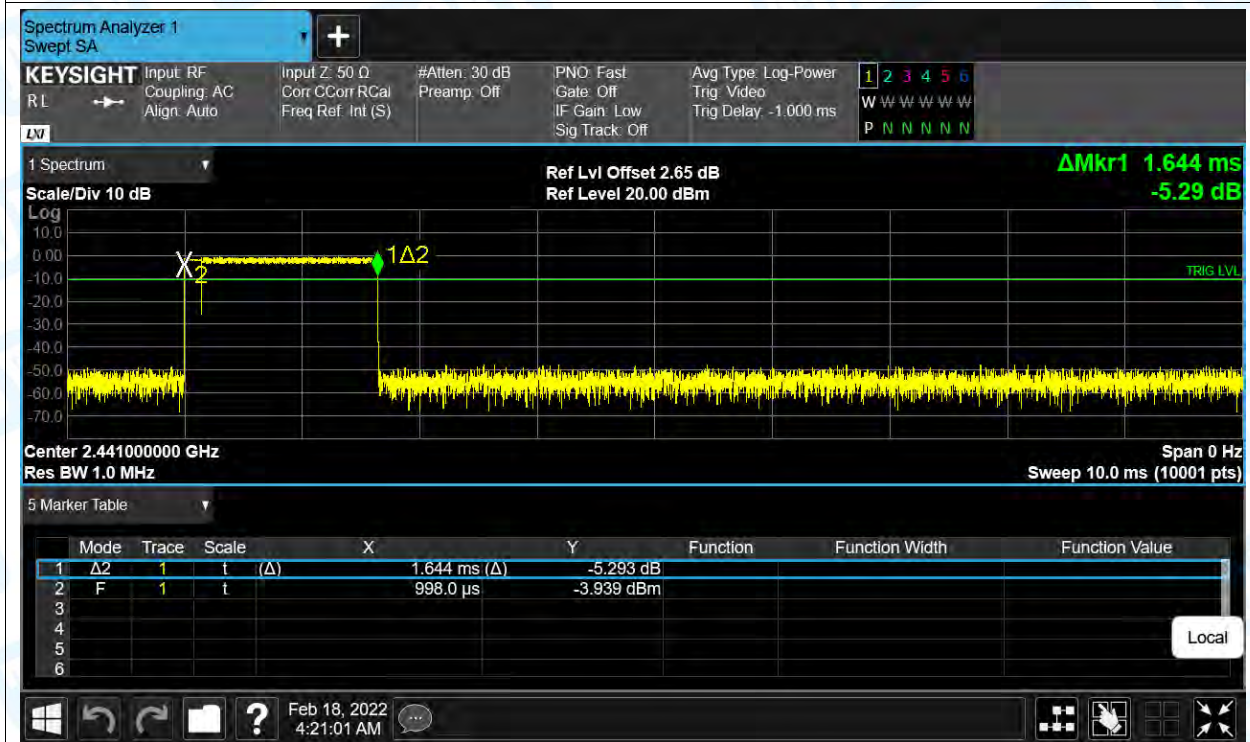


Dwell NVNT 1-DH3 2441MHz Ant1





Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1

